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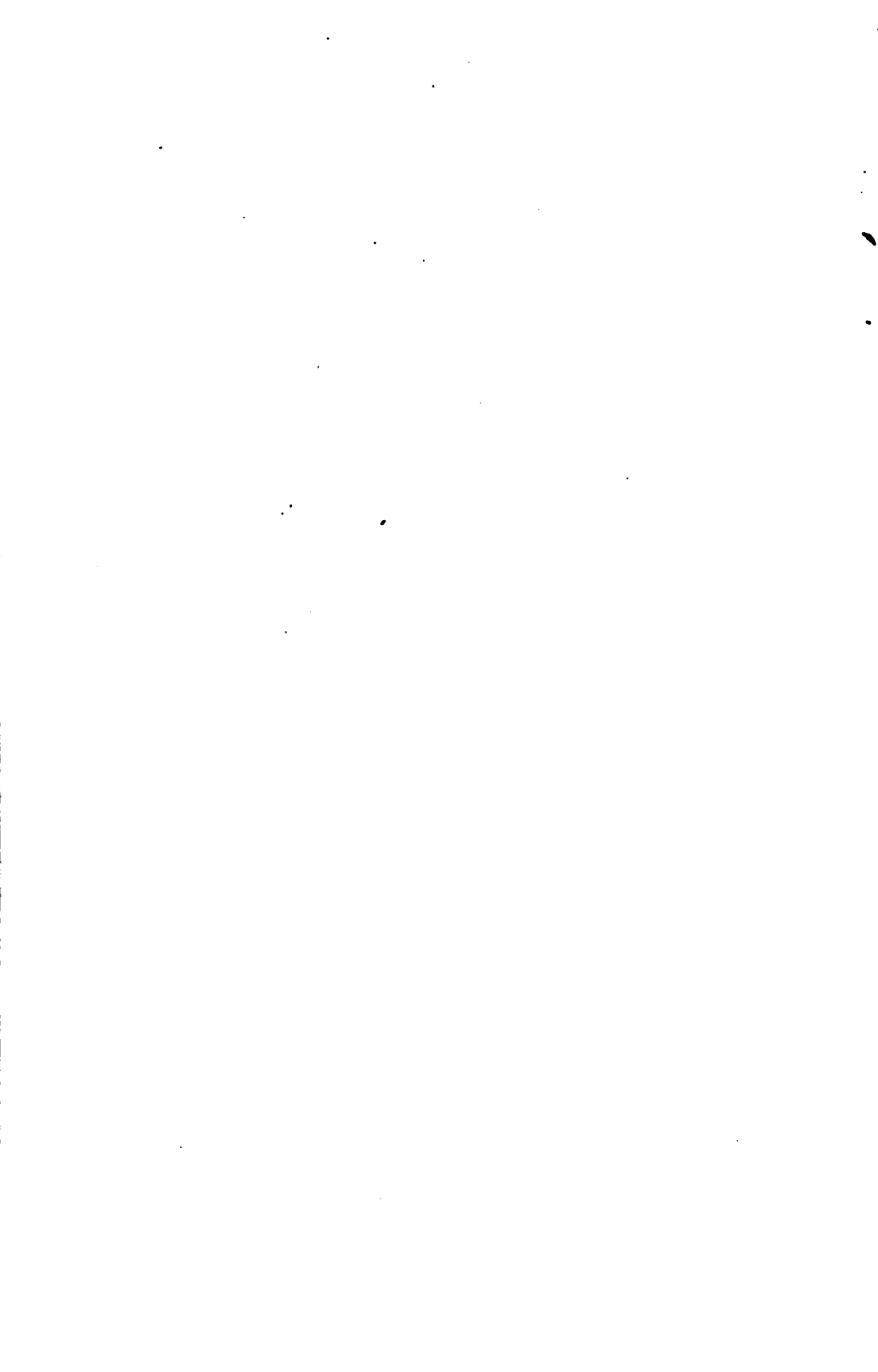
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Sixth Annual Report

. . . . of the

★ Board of Public Works

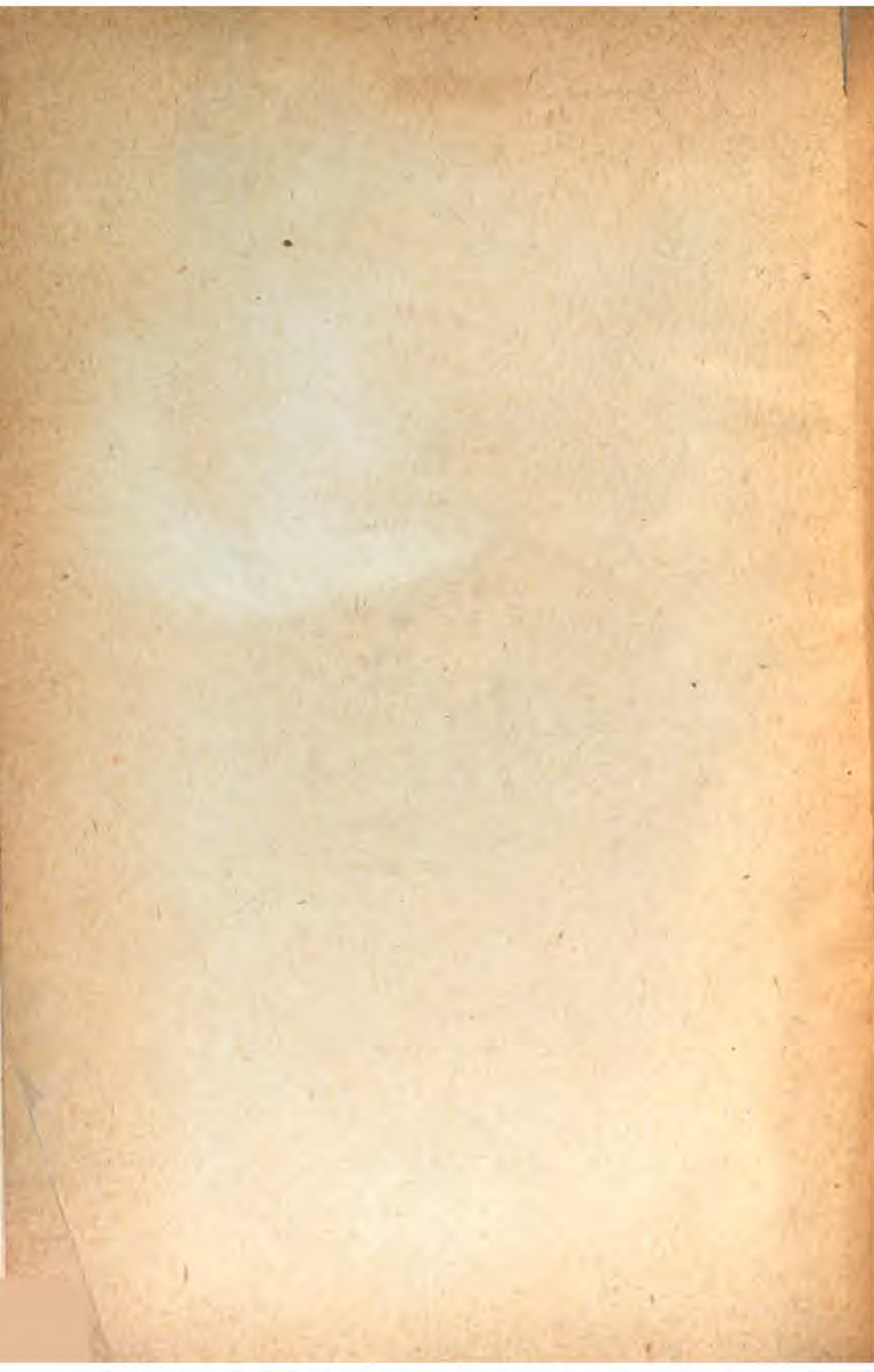


Of Kansas City, Mo.

. . . . for the

Fiscal Year 1894.

April 16, 1894, to April 15, 1895.

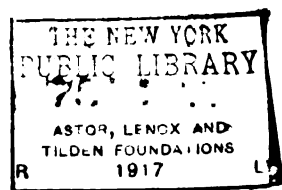


SIXTH ANNUAL REPORT
—OF THE—
BOARD OF PUBLIC WORKS



OF KANSAS CITY, Mo.
—FOR THE—
FISCAL YEAR 1894.
April 16, 1894, to April 15, 1895.

KANSAS CITY, MO.:
LAWTON & BURNAP, PRINTERS AND STATIONERS.
1895.



ROY W. M.
2.6.19
1917

BOARD OF PUBLIC WORKS.

PETER H. TIERNAN, - - - - President.
JOHN C. GAGE, - - - - Member.
R. S. OWEN, - - - - Member.
L. C. SLAVENS, - - - - Member.

H. P. LANGWORTHY, - - - - Secretary.
JOHN C. HOPE, - - - - Clerk of Supplies.
IDA G. FIELD, - - - - Stenographer.

DEPARTMENT OF ENGINEERING.

H. H. FILLEY, - - - - City Engineer.
STEPHEN A. MITCHELL, - - Assistant City Engineer.
JOHN M. BULLOCK, - - Superintendent of Construction.
JOHN MOLONY, - - - - Chief Clerk.
THOMAS F. CALLAHAN, Supt. of Sidewalks and Curbing.
BENJAMIN R. WHITNEY, JR., - - Chief Draughtsman.

DEPARTMENT OF STREETS AND ALLEYS.

THOMAS A. DODDS, - - - - Superintendent.
J. W. HUMPHREY, - - - - Chief Clerk.
FRANK J. HAEFNER, - - - - Clerk.

DEPARTMENT OF BUILDINGS.

A. W. LOVE, - - - - Superintendent.
SAMUEL E. BEAR, - - - - Clerk.

BOARD OF PUBLIC WORKS.

FISCAL YEAR 1889.

NAMES OF MEMBERS.

LENGTH OF SERVICE.

J. M. Patterson, President..June 11, 1889, to April 21, 1890.
 Fred. Howard, Member....June 11, 1889, to May 2, 1890.
 L. K. Thacher, "June 11, 1889, to April 25, 1890.
 Phil. E. Chappell, "June 11, 1889, to May 2, 1890.

FISCAL YEAR 1890.

J. S. Cannon, President....April 21, 1890, to April 18, 1892.
 Wm. Weston, Member....April 25, 1890, to April 27, 1891.
 W. A. Kelley, "May 2, 1890, to April 27, 1891.
 J. H. Beckham, "May 2, 1890, to April 27, 1891.

FISCAL YEAR 1891.

J. S. Cannon, President....Term expires April 18, 1892.
 Jno. R. Stoller, Member...April 27, 1891, to Nov. 12, 1891.
 H. C. Murphy, " ...April 27, 1891, to April 18, 1892.
 Chas. A. Rollert, " ...April 27, 1891, to April 25, 1893.
 *Geo. Holmes, " ...Nov. 12, 1891, to May 4, 1893.

FISCAL YEAR 1892.

Peter H. Tiernan, President.April 18, 1892—elected for 4 yrs.
 Chas. A. Rollert, Member..April 27, 1891, to April 25, 1893.
 Geo. Holmes, " ..Nov. 12, 1891, to May 4, 1893.
 †John Taylor, " ..April 28, 1892, to Aug. 9, 1892.
 ‡James H. Oglebay, " ..Aug. 9, 1892, to April 22, 1893.

FISCAL YEAR 1893.

Peter H. Tiernan, President.From April 18, 1892—term 4 yrs.
 Arthur J. Mason, Member..April 22, 1893, to April 26, 1894.
 Geo. Kumpf, " ..April 25, 1893, to April 25, 1894.
 ¶Geo. Holmes, " ..May 4, 1893, to May 25, 1894.

FISCAL YEAR 1894.

Peter H. Tiernan, President.From April 18, 1892—term 4 yrs.
 John C. Gage, Member....From April 25, 1894—term 2 yrs.
 L. C. Slavens, "From April 25, 1894—term 2 yrs.
 L. K. Thacher, "April 26, 1894 to Oct. 31, 1894.
 §R. S. Owen, "Nov. 30, 1894, —

*Geo. Holmes, appointed, vice Jno. R. Stoller, resigned.

†John Taylor, appointed, vice H. C. Murphy, resigned.

‡James H. Oglebay, appointed, vice John Taylor, resigned.

¶Geo. Holmes, re-appointed.

§R. S. Owen, appointed, vice L. K. Thacher, deceased.

REPORT OF THE BOARD OF PUBLIC WORKS

OF KANSAS CITY, MISSOURI,

FOR FISCAL YEAR ENDING APRIL 15, 1895

To the Honorable Common Council:

GENTLEMEN—The Board of Public Works herewith respectfully submits its annual report for the fiscal year 1894 (from April 16, 1894 to April 15, 1895.)

† LUIN K. THACHER.

In the death of Major Luin K. Thacher on the 31st day of October, 1894, the Board lost the services of a valuable and hard working member. Appointed as a member of the first Board of Public Works, Major Thacher had much to do with systematizing and starting the work of the department on a sound business basis. A man of extensive business experience, of good judgment and conservative, he was peculiarly fitted to perform the duties devolving upon him as a member of this Board, and in all public duties to which he was called he took a prominent and useful part. In his death the City lost a patriotic and faithful public officer.

On learning of the death of Major Thacher, the Board adopted appropriate resolutions, and then, as a mark of respect to his memory, adjourned.

RESOLUTIONS ADOPTED BY THE BOARD OF PUBLIC WORKS,
OCTOBER 31, 1894. SPECIAL SESSION.

WHEREAS, The undersigned members of this Board have just learned with deepest regret and sorrow, of the sudden death of our esteemed associate and fellow member, Major L. K. Thacher, therefore,

Be it Resolved:

1st. That in the death of Major Thacher, this community has lost a

distinguished and useful citizen, the city an able and efficient officer, and we, his associates on this Board, a warm personal friend.

2nd. That fully realizing what poignancy of grief this blow must bring to his family, we hereby tender to them our heartfelt sympathy.

3rd. That these resolutions be spread upon the records of this Board, and a copy thereof be sent to the family of the deceased, and that as a mark of respect to his memory, this Board does now adjourn.

PETER H. TIERNAN,
JOHN C. GAGE,
L. C. SLAVENS.

FINANCES.

The apportionment for the year of \$145,000.00, made by your Honorable Body for the use of this Department was increased by \$2,728.33 collections made in excess of the apportionment. The unexpended appropriations amounting to \$6,016.44, and the cash surplus \$8,278.26 carried over from the fiscal year 1893, remained to the credit of the Board. The available fund was also increased in the sum of \$607.08 rent paid by contractors for use of the Steam Road Roller.

Early in the fiscal year the cash surplus of \$8,278.26 carried over from the fiscal year 1893 was, by ordinance, apportioned with the anticipated revenue for the year to the use of the several City departments. The cash balance on hand at the close of the fiscal year, viz. \$5,503.68 was appropriated by the Common Council for other purposes. The total amount therefore to be accounted for by the Board is \$148,848.17.

The total receipts and disbursements for the fiscal year are as follows:

RECEIPTS.

Apportionment by the Common Council.....	\$145,000.00
Collections in excess of apportionment.....	2,728.33
Unexpended appropriations from fiscal year 1893.....	6,016.44
Cash surplus from fiscal year 1893.....	8,278.26
Steam road roller rent.....	607.08
Total	\$162,630.11

CONTRA.

Cash Surplus 1893 (apportioned) .	\$8,278.26
Cash balance on hand at close of year appropriated by the Common Council	5,503.68
Balance to be accounted for.....	\$ 13,781.94
	\$148,848.17

DISBURSEMENTS.			
DEPARTMENT EXPENSES.	{	Board of Public Works	\$ 9,857.67
		Engineering Department	43,059.70
		Street and Alley Department	79,219.15
		Building Department.....	5,799.57
			<u>\$137,936.09</u>
Appropriations—Expenditures on account of			8,296.35
“ —Unexpended. Cash in City Treasury			2,615.73
Total			<u>\$148,848.17</u>

In making the apportionment of \$145,000.00 the Common Council provided that \$5,000.00 should be set aside and used in the construction of a public intercepting sewer from the eastern City limits to the Big Blue River (known as the Goose Neck Creek intercepting sewer). The work was completed during the year at a cost of \$4,999.90.

The sum of \$607.08 was received from contractors for rental of the Steam Road Roller, while the expenses for the year amounted to \$1,541.58, an excess in expense of \$934.50.

The following table shows the expenses of the several departments of the Board of Public Works, and the funds at its disposal, to be accounted for each year since its organization.

**EXPENDITURES OF THE BOARD OF PUBLIC WORKS
DEPARTMENT SINCE ORGANIZED.**

Fiscal year ending in April.	Board of Public Works.	Engineer- ing depart- ment.	Street and Alley depart- ment.	Building depart- ment.	Total.	Funds at disposal of Board and to be ac- counted for.
1890	\$ 6,658.73	\$ 71,843.36	\$ 83,392.28	\$17,368.37	\$179,262.74	\$ 369,814.57
1891	14,597.75	70,957.86	95,316.44	12,728.71	193,595.76	268,417.95
1892	10,947.76	56,354.03	86,409.76	7,871.47	161,583.02	223,882.03
1893	9,274.23	57,858.11	80,507.88	7,382.81	155,022.03	177,090.74
1894	24,583.13	49,495.91	67,746.25	6,551.82	148,376.61	181,499.61
1895	9,857.67	43,059.70	79,219.15	5,799.57	137,936.09	148,846.17
Total	\$75,919.27	\$349,588.97	\$492,591.26	\$57,696.75	\$975,796.25	\$1,269,553.07

DEPARTMENT OF ENGINEERING.

PUBLIC IMPROVEMENTS.

Table "A" prepared in the Engineering Department gives in detail the total amount of public work constructed through that department, and the total expenses of the department since the organization of the Board of Public Works.

TABLE "A."

Fiscal Year Ending April.	Grading Streets and Alleys.	Curbing	Paving Streets and Alleys.	Side-walks, Plank.	Side-walks, First Class.	Side-walk Repairs.	Bridges and Viaducts.	Sewers, District.	Sewers, Public.	Sewers, O. K. Creek.	Sprinkling and Cleaning.	Miscellaneous Public Work.	Total Amount of Work.	Expenses of Engineering Department.
1890.....	\$100,731.71	\$73,412.44	\$75,702.34	\$38,714.33	\$22,070.47	.....	\$37,206.00	\$140,637.27	\$7,553.20	.....	.....	\$6,282.12	\$803,359.88	\$71,863.36
1891....	59,707.70	30,271.49	144,118.43	56,931.64	92,094.81	\$6,973.57	6,213.87	73,730.29	12,691.50	\$6,811.64	1,386.98	2,215.14	579,106.76	70,957.86
1892....	54,910.36	27,103.42	238,072.98	13,533.83	52,248.35	8,721.43	3,576.00	19,432.20	8,413.36	51,114.52	426.72	1,325.98	433,184.15	56,354.03
1893....	17,945.63	33,004.09	223,431.91	8,513.98	27,594.33	8,943.42	.....	20,835.88	12,493.16	35,623.12	2,364.18	407.69	391,207.39	57,858.11
1894.....	42,020.79	36,094.03	530,770.21	8,380.95	28,633.03	11,216.05	15,300.00	63,633.00	1,724.49	41,838.77	25,522.65	2,001.79	810,139.76	49,495.91
1895....	12,862.56	11,458.33	406,071.07	3,528.15	20,947.20	7,644.37	.....	81,834.41	4,999.90	.....	44,715.00	3,583.70	597,681.60	43,069.70
Total....	\$293,214.75	\$211,347.40	\$1,918,156.94	\$129,652.48	\$243,678.19	\$46,455.84	\$63,055.37	\$400,193.05	\$48,180.61	\$215,488.05	\$74,415.53	\$16,016.42	\$3,658,759.63	\$349,588.97

The work completed during the fiscal year through the Engineering department cost \$597,681.69, and the expense of the department was \$43,059.70 for all purposes. As compared with the previous fiscal year (1893) there is a decrease in the amount of work completed of \$212,508.07, and a decrease in the expenses of \$6,436.21. Compared with the fiscal year 1892, there is a large increase in work completed, viz., \$206,474.30, and the remarkable decrease of \$14,798.41 in expenses.

Of the \$597,681.69 expended for public work during the year, the sum of \$589,098.09 was paid in Special Tax Bills; and \$8,583.60 was paid in cash out of the City treasury.

PAVING.

The paving and repaving of streets and alleys cost \$406,-071.07 (\$403,024.20 for streets and \$3,046.87 for alleys).

The mileage and cost of each kind of pavement is as follows:

Material.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt—Trinidad Lake	27,221.70	5.16	118,460.26	\$308,754.62	\$2.64
Macadam	6,837.60	1.29	21,772.00	19,587.02	.899
Granite Blocks	329.30	0.06	1,238.80	8,077.84	2.47
Brick, Vitrified	18,131.40	2.49	45,977.80	61,914.79	1.346
Cedar Blocks, repave.	2,068.15	0.39	8,481.60	9,689.93	1.05
Total	49,588.35	9.39	195,930.46	\$403,024.20	

It may be noted that of the total cost of street paving, by far the larger amount was paid for Asphalt, viz: \$308,754.62.

The following tables show the mileage and cost of all street paving work constructed from 1889 to 1894, inclusive, and kinds of material used.

RECAPITULATION OF STREET PAVING CONSTRUCTED, COMMENCING JANUARY 1, 1889, ENDING MAY 9, 1889.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt.....	2,570.00	0.486	7,645.63	\$21,407.76	\$2.80
Macadam.....	1,027.00	.194	4,098.70	2,746.13	.67
Total	3,597.00	0.680	11,744.33	\$24,153.89	

RECAPITULATION OF STREET PAVING CONSTRUCTED DURING FISCAL YEAR COMMENCING MAY 9, 1889, AND ENDING APRIL 30, 1890.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt.....	10,764.30	2.04	40,244.27	\$112,643.96	\$2.80
Cedar Blocks	87,674.97	7.135	146,772.14	308,607.08	1.421
Granite Blocks	1,173.00	.222	5,079.57	16,327.42	3.253
Brick	3,525.00	.667	13,256.72	27,056.36	2.041
Total	53,137.27	10.064	205,352.70	\$364,874.82	

RECAPITULATION OF STREET PAVING CONSTRUCTED DURING FISCAL YEAR COMMENCING APRIL 30, 1890, AND ENDING APRIL 20, 1891.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt.....	4,752.00	0.90	17,640.60	\$ 48,890.92	\$2.765
Cedar Blocks.....	14,901.70	2.82	50,394.60	71,160.74	1.412
Macadam.....	546.00	.10	2,745.00	1,161.30	.42
Stone Blocks.....	2,653.80	.50	7,913.80	23,074.89	2.915
Total	22,853.50	4.32	78,756.00	\$144,287.85	

**RECAPITULATION OF STREET PAVING CONSTRUCTED DURING
FISCAL YEAR COMMENCING APRIL 20, 1891, AND
ENDING APRIL 18, 1892.**

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt.....	15,126.00	2.86	57,110.89	\$144,298.71	\$2.526
Brick.....	6,682.50	1.27	24,079.80	40,390.62	1.677
Macadam.....	8,825.80	1.67	34,253.50	82,889.91	.958
Stone Blocks.....	774.30	.14	3,054.70	7,859.91	2.573
Cedar Blocks.....	1,334.20	.26	4,572.90	6,767.89	1.48
Total	32,742.80	6.20	128,071.79	\$232,157.04	

**RECAPITULATION OF STREETS PAVED DURING FISCAL YEAR
ENDING APRIL 17, 1893.**

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Brick.....	9,584.95	1.80	34,829.30	\$ 57,557.74	\$1.649
Asphalt.....	12,394.15	2.35	48,163.80	124,117.04	2.576
Macadam.....	14,618.06	2.62	50,207.70	37,510.46	.747
Total	36,597.16	6.77	133,200.80	\$219,185.24	

**RECAPITULATION OF STREET PAVING CONSTRUCTED DURING
FISCAL YEAR ENDING APRIL 16, 1894.**

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt.....	29,096.10	5.51	99,443.50	\$257,089.35	\$2.585
Macadam.....	18,958.15	3.59	74,001.60	63,945.47	.864
Vitrified Brick.....	32,116.10	6.08	118,962.60	195,184.95	1.647
Stone Blocks, repairs.....	2,250.00	.42	9,937.50	6,265.88	.63
Total	82,420.35	15.60	302,345.20	\$522,485.65	

There has been an increase of 5.16 miles of asphalt, 2.49 miles of brick, 1.29 miles of macadam and .06 miles of stone pavement during the year, and a net decrease of 6.008 miles of cedar block pavement, only one street being paved (repaved) with cedar blocks, viz: Ninth street, from Mulberry street to the State Line.

The aggregate mileage of paved streets is as follows:

	Total Miles.	Increase during year. Miles.	Decrease during year. Miles.
Cedar Blocks.....	37.04		6.008
Asphalt.....	20.91	5.16	
Brick.....	12.69	2.49	
Macadam.....	10.45	1.29	
Stone.....	2.14	0.06	
Total.....	83.23	9.00	6.008

At the close of the fiscal year the public work under contract as shown by the tabulated statement prepared by the City Engineer, was estimated to cost \$74,287.91, distributed as follows:

Paving.....	\$39,593.67
Sidewalks.....	2,424.15
Grading.....	17,120.42
District Sewers.....	567.36
Cleaning and Sprinkling.....	14,582.31

There are under contract, one street to be paved with asphalt, three streets to be paved with brick and one street with macadam, all estimated to cost \$39,593.67. The estimated cost of the street to be paved with macadam, namely: Independence Boulevard, from Woodland avenue to Walrond avenue is \$25,228.84, the work to be done according to specifications prepared by the Board of Park and Boulevard Commissioners. This work is nearly completed. The estimated aggregate cost of the streets to be paved with asphalt and brick is \$14,364.83.

Among the largest contracts of the year for paving with asphalt, all of them displacing cedar block pavement, were Grand avenue from Thirteenth street to Twentieth street, involving the construction of 21,275.80 square yards, costing \$56,380.87; Fourteenth street from Broadway to Virginia avenue, 20,269.50 square yards, at a cost of \$52,092.62; Grand avenue from Ninth street to Thirteenth street, 12,774.90

square yards, costing \$33,853.49; Forest avenue from Independence avenue to twelfth street, 11,027.06 square yards, costing \$28,339.54; and Locust street from Eighth street to Fifteenth street, 11,311.10 square yards, costing \$28,277.75. The average cost of asphalt pavement for the year was \$2.64 per square yard.

The principal brick contracts were Thirteenth street from Grand avenue to Flora avenue, 16,848.00 square yards, costing \$21,565.44; Locust street from Fifteenth street to Eighteenth street, 5,543.70 square yards, costing \$6,846.47; and Locust street from Independence avenue to Eighth street, 4,312.10 square yards, costing \$5,347.00, all in place of worn out cedar block pavements. The average cost for brick pavement for the year was \$1.346 per square yard.

Macadamizing Southwest Boulevard from Main street to Broadway cost \$6,968.90, replacing worn out cedar blocks. Park avenue from Twelfth street to Eighteenth street was macadamized at a cost of \$1.07 per square yard, 8,399.60 square yards being laid at a total cost of \$8,987.57. The macadam on Lydia avenue from Independence avenue to Eighth street, and Baltimore avenue from Twenty-third street to Twenty-fifth street, cost 58½ cents and 49½ cents per square yard respectively. The average cost of macadam for the year was 89.9 cents per square yard.

Walnut street from Fourth street to Fifth street was the only street paved with stone during the year and in this case also the pavement displaced was worn out cedar blocks. The material used was granite blocks; cost, \$2.47 per square yard.

The specifications for all kinds of street paving are given in the tabulated statement prepared in the Department of Engineering and published with the City Engineer's report herewith.

CURBING.

There was 25,382.50 lineal feet of curbing constructed during the year at a total cost of \$11,458.33, of which amount

the property owners constructed 13,560.00 lineal feet at a cost of \$5,819.50, and the City constructed by public contract 11,822.50 lineal feet at a cost of \$5,638.83, paid for in Special Tax Bills.

Curb and gutter was constructed on Baltimore avenue from Twenty-third street to south line of Waldo place, the property owners paying 80c per lineal foot for that part of the curb and gutter they constructed by private contract, the City paying, in Special Tax Bills, 72c per foot for all constructed by public contract.

The Parkhurst Combined Curb and Gutter, the first of the kind laid in this City, was constructed on Eleventh street from Grand avenue to Locust street, for which the property owners paid 90c per foot and the City 85c per foot.

During the year 4,807 miles of curbing was constructed at an average cost of 45c per foot.

To show the relative prices paid in cash by property owners for curbing constructed by private contract, and prices paid by the City for work done by public contract, paid for in Special Tax Bills, the following table has been prepared.

CURBING CONSTRUCTED. FISCAL YEAR 1894.

	Thickness in Inches.	By Property Owners.			By Public Contract.		
		Lineal Feet.	Cost per Foot.	Total Cost.	Lineal Feet.	Cost per Foot.	Total Cost.
Contracts for eight streets	5	.....	.....	.....	618.00	\$0.39 1/2	\$242.56
		.....	.....	.....	309.90	.39 1/2	122.41
		.....	.....	.....	1,077.90	.39 1/2	425.77
		.....	.....	.....	288.20	.35	100.87
		10,470.00	\$0.40	\$4,188.00	1,338.80	.37 1/2	499.03
Contracts for two streets	5	.....	.....	.....	168.40	.38	63.99
		.....	.....	.....	872.90	.36 1/2	318.61
		.....	.....	.....	388.70	.36	121.93
		800.00	.45	360.00	520.60	.40	208.24
		1,220.00	.45	549.00	765.50	.41	313.85
Contract for one street	5	.....	.....	.....	286.90	.48	85.46
Curb and Gutter one street	.....	530.00	.80	424.00	1,125.80	.72	810.58
Parkhurst's Combined Curb and Gutter one street	.....	165.00	.90	148.50	1,716.00	.85	1,458.60
Contract one street	4	375.00	.40	150.00	1,571.70	.37	581.53
Construction and Repair Contract one street	4	.....	.....	.....	823.20	.15 } .05 }	235.40
		13,560.00		\$5,819.50	11,822.50		\$5,638.33

Average cost eight streets, private contract, \$0.40 per foot.

Average cost eight streets, public contract, \$0.376 per foot.

Average cost thirteen streets, private contract, \$0.477 per foot.

Average cost thirteen streets, public contract, \$0.443 per foot.

FIRST-CLASS SIDEWALKS.

The sum of \$20,987.20 was expended during the year in the construction of first-class sidewalks as follows :

	sq. ft.	COST.
Artificial Stone & Hexagon Blocks (9 streets).....	102,584.20	\$19,610.66
Stone (1 street).....	5,666.40	1,132.54
Brick (1 street)	2,470.00	244.00
Total	110,720.60	\$20,987.20
	sq. ft.	COST.
Constructed by property owners and paid for in cash.	97,312.00	\$18,616.40
Constructed by public contract and paid for in Special		
Tax Bills.....	13,408.60	2,370.80
Total	110,720.60	\$20,987.20

Eleven contracts, 20.97 miles. The subjoined statement will show the prices paid in cash for first-class sidewalks by property owners, and by the City in Special Tax Bills.

FIRST CLASS SIDEWALKS CONSTRUCTED. FISCAL YEAR 1894.

	Width. Feet.	By Property Owners.			By Public Contract.		
		Square Feet.	Cost per Foot.	Total Cost.	Square Feet.	Cost per Foot.	Total Cost.
Contract six streets, Artificial Stone and Hexagon Blocks	6	57,772.00	\$0.20	\$11,554.40	1,583.10	\$0.18 $\frac{1}{2}$	\$291.83
					850.00	.18	153.00
					874.60	.17 $\frac{1}{2}$	153.05
					2,130.20	.17 $\frac{1}{2}$	372.78
					555.00	.17 $\frac{1}{2}$	97.11
					1,941.20	.17 $\frac{1}{2}$	339.71
Contract two streets, Artificial Stone and Hexagon Blocks	6	31,950.00	.18	5,751.00	904.70	.17 $\frac{1}{2}$	157.37
Contract one street, Artificial Stone and Hexagon Blocks					3,424.20	.16	547.87
Stone, one street	6	5,520.00	.20	1,104.00	505.20	.24	121.24
Brick, one street	5	2,070.00	.10	207.00	400.00	.09 $\frac{1}{2}$	38.00
		97,312.00		\$18,616.40	13,408.60		\$2,370.80

At the close of the year three streets were under contract for Hexagon Blocks, estimated to cost \$1,783.04.

SECOND-CLASS SIDEWALKS.

During the year 13,521.50 lineal feet of plank (second-class) sidewalks was constructed at a total cost of \$3,528.15; and there was 2,509.30 lineal feet under contract at close of year, estimated to cost \$641.11.

The price paid by the City for plank sidewalks ranged from 21.95 to 24.9 cents per lineal foot, and by property owners at private contract 25c per lineal foot, with one exception—that on the east side of Vine street from Nineteenth street to Twenty-third street—the City paying 43½ cents and property owners 45c per lineal foot, the work being of a more difficult character than usual. There was 2.56 miles of plank sidewalks constructed at an average cost of 0.261 cents per lineal foot.

REPAIRS OF SIDEWALKS AND CURBING.

The repairs of sidewalks and curbing forms a considerable item, as follows:

1st Class Sidewalks and Curbing.....	\$ 898.29
2nd Class (plank) Sidewalks	6,743.08
Total	\$7,641.37

The repair work on sidewalks and curbing is done by yearly contracts and paid for in Special Tax Bills.

GRADING.

There were eleven street grading contracts completed during the year, 1.61 miles, at a cost of \$11,006.38, and nine alley grading contracts completed, 0.74 miles, at a cost of \$1,856.18. A total for grading streets and alleys of \$12,862.56.

The estimated cost of street grading under contract at close of the year was \$16,800.79, and of alley grading \$319.63.

SEWERS.

Six and $\frac{27}{100}$ miles of district sewers were constructed during the year at a cost of \$81,834.41, as follows:

	Lineal Feet.	Cost.
Joint Districts 94 and 104	866.80	\$ 913.88
District No. 89	34,623.50	79,253.94
" No. 90	538.30	429.50
" No. 176	785.10	12,237.09
Total	36,813.70	\$81,834.41

Only one district sewer, No. 43, was under contract at close of the year; estimated cost \$567.36.

The only public sewer constructed during the year was the intercepting sewer from the eastern City limits to the Big Blue River. This sewer cost \$4,999.90, the total length being 14,125.1 feet.

CLEANING AND SPRINKLING STREETS.

There was a large increase in the total amount expended for cleaning and sprinkling streets over the previous fiscal year (1893). The amount expended in the fiscal year 1893 was \$25,522.65; and for the past year (1894) the total cost was \$44,715.00, as follows:

CLEANING AND SPRINKLING STREETS.

MARCH 1, 1894, TO OCT. 31 AND NOV. 30, 1894.

	Lineal Feet of Property	Lineal Feet of Street.	Miles.	Average Cost per Lineal Foot, Property.	Average Cost per Lineal Foot, Street.	Total Cost.
Sprinkling.	177,219.54	101,253.50	19.18	\$0.1005	\$0.1759	\$17,818.30
Cleaning.	93,655.47	54,585.00	10.34	.1271	.2181	11,908.03
Cleaning and Sprinkling.	64,586.46	37,262.50	7.06	.2322	.4002	14,938.67
Total	335,411.47	193,101.00	36.58			\$44,715 00

The contracts in force at close of year are :

	Amount.
Cleaning, six contracts, estimated cost	\$ 3,724.50
Sprinkling, seventeen contracts, estimated cost	8,998.16
Cleaning and Sprinkling, three contracts, estimated cost.....	1,859.65
Total	\$14,582.31
Estimated time from March 1st to November 30th, 1895.	

DEPARTMENT OF STREETS AND ALLEYS.

The total amount expended through this department in repairing streets, sewers, bridges, sidewalks, constructing cross-walks, cleaning and sprinkling streets, and for various other purposes, as set forth in detail in the tabulated statement, was \$79,-219.15. The pay rolls of the department show the expenditure of \$62,960.12, and the sum of \$16,259.03 was expended in the purchase of material of all kinds used in repair work, purchase of tools and machinery and repairs of same, and other necessary demands of the department.

The distribution of the pay roll is as follows:

Superintendent	\$ 2,000.00	
Clerks	1,836.98	
Inspectors	2,629.30	\$ 6,466.28
Foremen	\$ 3,585.71	
Carpenters	1,344.65	
Pavers	1,304.24	
Masons	1,352.00	
Teams	16,953.18	
Laborers	31,954.06	56,493.84
Total		\$62,960.12

The following table gives in condensed form the manner in which the work of the department is divided, and the money expended.

STREETS AND ALLEYS, (DEPARTMENT OF) EXPENDITURES.

FOR FISCAL YEAR 1894. (APRIL 16, 1894, TO APRIL 15, 1895.)

MISCELLANEOUS WORK.

Superintendent and Clerks, salaries	\$ 3,836.98	
Inspectors, salaries	3,048.92	
Horses, keep and hire.	924.10	
Tools, new	590.97	
Tools and Machinery, etc , repairs.....	838.45	
Telephone, rental.....	72.00	
Rental Lot 11th and Troost, city yards	60.00	
K. C. Improved Street Sprinkling Co., contract	360.00	
Sundries	756.11	
Total		\$10,487.53

WORK DISTRIBUTED ON STREETS.

Cleaning		\$25,620.73
Paved streets	Material, \$ 868.71	
Paved streets	Labor, 4,242.46	5,111.17
Dirt and macadam streets	Material, 901.41	
Dirt and macadam streets	Labor, 5,872.47	6,773.88
Sewer maintenance	Material, 1,175.68	
Sewer maintenance	Labor, 5,899.10	7,074.78
Crosswalks	Material, 5,552.93	
Crosswalks	Labor, 3,933.03	9,485.96
Sidewalks	Material, 94.13	
Sidewalks	Labor, 300.73	394.86
Bridges	Material, 1,048.80	
Bridges	Labor, 1,043.22	2,092.02
Miscellaneous	Material, 52.24	
Miscellaneous	Labor, 406.88	459.12
Total		\$57,012.52

WORK DISTRIBUTED ON ALLEYS.

Cleaning		\$ 810.20
Paved alleys.....	Material, \$ 6.23	
Paved alleys.....	Labor, 62.24	68.47
Unpaved alleys.....	Material, 10.80	
Unpaved alleys.....	Labor, 83.23	94.03
Sewer maintenance	Material, 53.82	
Sewer maintenance	Labor, 441.76	495.58
Total.		\$ 1,468.28
Amount forward.....		\$68,968.33

Amount brought forward..... \$68,968.33

MISCELLANEOUS WORK.

Cleaning, general	\$	105.05	
Hauling prisoners		119.02	
Cutting weeds.....		890.36	
Main street sewer.....	Material,	\$1,492.89	
Main street sewer.....	Labor,	2,335.22	3,828.11
General sewer work.....	Material,	39.23	
General sewer work.....	Labor,	103.85	143.08
City yards.....	Material,	19.53	
City yards.....	Labor,	412.84	432.37
Fountains.....	Material,	56.68	
Fountains	Labor,	359.08	415.76
James street viaduct ...	Material,	475.75	
James street viaduct	Labor,	179.85	655.60
General work.	Material,	4.95	
General work.....	Labor,	1,469.73	1,474.68
Total.....			\$ 8,064.03
Material on hand, estimated at close of year.....			2,186.79
Total expenditures			\$79,219.15

For further information regarding the work of the department, reference may be had to the complete report herewith published.

DEPARTMENT OF BUILDINGS.

The following table shows the work of the Department of Buildings. For details and tabulated statements reference may be had to the report of that department herewith published.

DEPARTMENT OF BUILDINGS.

FISCAL YEAR 1894.

Kind of Buildings.	Number Permits.	Front Feet.	Estimated Cost.	Fees.	Official Notices Served.	Pay Rolls and Misc'l Expenses.
Brick	142	5,901	\$ 817,665.00	\$ 419 30		
Frame	171	8,591	224,150 00	144 70		
Miscellaneous Permits.....	1,384		376,440.00	766 10		
Total for the year.....	1,737	9,492	\$1,418,695.00	\$1,334.10	341	\$5,799 57

LIGHTING STREETS.

At the close of the fiscal year there were 1,691 gas lights, 1,140 gasoline lights and 143 electric lights in service, an increase of 6 gas lights and 1 gasoline light during the year and a net decrease of 4 electric lights.

The decrease in the number of electric lights was caused by the City lighting the Market House from the City Hall electric light plant, which is now being done in a very satisfactory manner.

The apportionment of \$60,000.00 being insufficient to meet the expense of lighting for the year with the number of street lights in service, it became necessary to either decrease the number of lights, or arrange with the companies doing the work for a reduction in the prices charged. The Gas Committees of the Common Council presented the matter to the companies doing the lighting, and after some consideration, they agreed to make deductions on their monthly bills, so as to bring the total expense of street lighting for the year within the apportionment.

The City paid \$17.50 each for gas lights (moonlight schedule), \$19.00 each for gasoline lights (full moonlight schedule), and \$119.50 each for electric (arc) lights (all night schedule), and the total cost of street lighting for the year was \$58,428.01, as follows:

	Total.	Deductions.	Amount Paid.
K. C. Gas Light & Coke Co.....	\$28,373.36	\$3,702.87	\$24,670.49
F. K. Hoover, Gasoline Lights...	21,660.10	2,872.80	18,787.20
K. C. Electric Light Co.....	17,053.43	2,083.11	14,970.32
Total.....	\$67,086.79	\$8,658.78	\$58,428.01

Cost for the year 1893, \$68,929.10.

The bills of the Gas Company and Electric Light Company for the first half of April (1-15), close of the fiscal year, were not presented in time for payment.

In December a contract was let for lighting the Market

House from the electric light plant in the basement of the City Hall (this was suggested in the report of this Board for 1892), pursuant to an ordinance appropriating \$300.00 therefor, to be expended under the direction of the Board of Public Works. The work was done according to plans and specifications prepared by the Superintendent of Buildings and cost \$281.50. Ten incandescent-arc lights, with proper fixtures, connecting with the City Hall plant, were installed in the Market House, displacing 9 arc lights for which the City was paying the Electric Light Company \$119.50 each, a saving to the City of \$1,075.50 per annum.

In addition to the lights placed in the Market House by the City, the renters of stalls have put in, at their own expense and repair, some 225 incandescent lights, each stall occupant putting in as many lights as desired.

As the result of the expenditure of a small amount of money, the Market House is being thoroughly lighted, and at so little expense to the City each year that it can scarcely be compared to the former outlay.

THE BOARD OF PUBLIC WORKS.

PETER H. TIERNAN, *President.*

JOHN C. GAGE,

R. S. OWEN,

L. C. SLAVENS,

} *Members.*

April 15th, 1895.

STATEMENT OF BOARD OF PUBLIC WORKS FUND

FOR THE FISCAL YEAR ENDING APRIL 15, 1895.

Apportionment for the fiscal year 1894..	\$145,000.00
Appropriations (unexpended) from last fiscal year.....	6,016.44
Cash balance from last fiscal year.....	8,278.26
Steam road roller, rent from.....	607.08
Apportionment, excess of collections....	2,728.33
Total.....	<u>\$162,630.11</u>

CONTRA.

Cash balance from last fiscal year, re-appropriated.....	\$ 8,278.26
Cash surplus at end of fiscal year, appropriated.....	5,503.68
Total.....	<u>\$ 13,781.94</u>
Balance to be accounted for	\$148,848.17

EXPENSES—BOARD OF PUBLIC WORKS.

Pay rolls—members and clerks.....	\$ 6,113.21
Miscellaneous expenses.....	937.25
Steam road roller, pay rolls, repairs, etc..	1,541.58
Drinking fountains, repairs of.....	451.16
Condemnations, expense of.....	359.25
City Hall, repairs of.....	136.38
Printing and stationery, expense.....	319.84
	<u>\$ 9,857.67</u>

ENGINEERING DEPARTMENT.

Pay rolls—Engineer and assistant.....	\$ 5,017.95
“ Clerical department.....	5,798.93
“ Draughting “	4,585.49
“ Transitmen, roadmen and chainmen.....	9,618.99
“ Construction department....	7,199.65
“ Grading “	1,070.78
“ Sidewalk and Curbing dep’t.	5,883.39
“ Inspector of excavations.....	897.50
	<u>\$ 40,072.68</u>
Horse hire.....	1,341.48
Miscellaneous expense	616.60
Abstracts, grading cases and general information.....	486.74
Printing and stationery.....	542.20
Total.....	<u>\$ 43,059.70</u>
Amount forward.....	\$ 52,917.37

Amount brought forward..... \$ 52,917.37

STREET AND ALLEY DEPARTMENT.

Pay rolls—Superintendent.....	\$ 2,000.00	
“ Clerks.....	1,836.98	
“ Inspectors.....	2,629.20	
“ Foremen.....	3,585.71	
“ Carpenters.....	1,344.65	
“ Pavers.....	1,304.24	
“ Masons.....	1,352.00	
“ Teams.....	16,953.18	
“ Laborers.....	31,954.06	
		\$ 62,960.12
Horse hire and keeping.....		913.10
Miscellaneous expenses.....		145.30
Repairs of machinery, tools, etc.....		912.65
Material for crosswalks, bridges, viaducts, etc.		6,908.96
Material for street repairs.....		3,860.85
Material for sewer “		3,213.89
Tools, etc.....		286.78
Printing and Stationery.....		17.50
Total		\$ 79,219.15

BUILDING DEPARTMENT.

Pay rolls—Superintendent.....	\$ 2,500.00	
“ Clerk	985.50	
“ Inspectors.....	2,281.60	
		\$ 5,767.10
Horse hire.....		7.25
Miscellaneous expenses (office).		25.22
Total.....		\$ 5,799.57
Department expenditures total.....		\$137,936.00

APPROPRIATIONS.

Ord. No.	CONTRACTS.
5680—Street signs, to purchase.....	\$ 876.20
5723—Smoke devices, to purchase for abatement of smoke.....	800.30
5761—City Hall, to fresco walls, ceilings, etc.....	1,615.35
5877—Intercepting sewer, City limits to the Blue.....	4,999.90
	<u>\$ 8,291.75</u>

CONDEMNATIONS.

5433—Confirm verdict, alley north of Eighteenth—Quest's Addition, to Euclid avenue.....	4.60
Total.....	<u>\$ 8,296.35</u>
Total expenditures from Board of Public Works fund	\$146,232.44
Appropriations (unexpended) forward to fiscal year 1895	2,615.73
Total	<u><u>\$148,848.17</u></u>

Respectfully submitted,
H. P. LANGWORTHY, *Secretary.*

FISCAL YEAR 1894. BOARD OF PUBLIC WORKS DEPARTMENT.
DISBURSEMENTS.

Month, 1894.	Board of Public Works.	Engineering Department.	Street and Alley Department.	Building Department.	Total Expenses.	Appropriations.	Contracts.	Appropriations	Total	Appropriations	Total
April 16-30	\$ 279.35	\$ 1,733.93	\$ 3,277.92	\$ 256.41	\$ 5,547.51						
May	748.37	3,483.12	5,956.34	514.46	10,702.31						
June	1,324.31	3,059.74	6,986.50	477.46	11,696.08						
July	829.09	3,688.16	8,399.95	477.78	13,394.98						
August	604.19	3,696.47	7,164.16	483.73	12,146.55						
September	711.26	3,746.12	6,267.12	484.00	11,210.50						
October	786.43	4,015.43	6,179.64	463.73	11,447.32						
November	931.13	3,721.50	5,326.60	477.73	10,637.16						
December	802.36	3,960.50	5,382.47	492.88	10,637.56						
1893.											
January	891.44	3,400.43	5,313.36	476.53	9,991.76						
February	592.83	3,222.17	6,129.73	482.13	10,406.83						
March	703.84	3,522.41	7,748.05	476.53	12,453.83						
April 1-15	469.27	1,857.73	5,117.09	234.71	7,653.80						
Totals.....	\$9,857.67	\$13,069.70	\$79,219.15	\$5,799.57	\$157,936.09		\$8,291.75	\$4.60	\$8,296.35		\$146,232.44

BOARD OF PUBLIC WORKS. DISBURSEMENTS 1894.

Month, 1894.	Pay Roll.	Miscellaneous Expense.	Steam Roller.	Fountain Repairs.	Condemnations	City Hall.	Printing and Stationery.	Total.
April 16-30.....	\$270.85	\$ 8.40	.....	\$192.70	.....	.....	.....	\$ 279.25
May.....	511.57	14.00	.....	119.15	.....	.....	.....	745.37
June.....	512.50	524.14	.....	63.62	660.00	615.43	.....	1,338.31
July.....	512.50	53.86	\$ 93.09	.....	42.00	23.17	.....	829.09
August.....	512.50	62.55	134.94	61.64	.....	34.30	.....	811.19
September.....	512.50	21.50	133.26	.....	45.00	2.70	.....	711.26
October.....	512.50	51.00	144.98	.....	60.00	.....	.....	768.43
November.....	426.17	1.00	138.65	4.32	24.00	20.15	.....	981.13
December.....	513.27	55.20	141.01	10.73	67.00	8.05	\$313.84	802.26
1895.								
January.....	512.50	6.20	872.74	.....	.....	.....	.....	891.44
February.....	512.50	1.85	57.75	.....	.....	21.23	.....	592.83
March.....	514.50	18.00	107.74	.....	61.25	6.35	.....	705.84
April 1-15.....	256.35	120.05	87.97	.....	.....	5.00	.....	469.27
Totals.....	\$6,113.21	\$937.25	\$1,541.58	\$451.16	\$559.25	\$136.98	\$318.84	\$9,837.67

BOARD OF PUBLIC WORKS. MISCELLANEOUS EXPENSE 1894.

Month, 1894.	Office Supplies and Repairs.	Street Paving Repairs.	Ground Rent 6th and Bluff.	Furniture.	Telephone Service Rental.	Sewers— Construction, Repairs.	Curbing, Construction.	11th Street, Olive to Prospect Rolling.	Total.
April 16-30	\$ 8.25	\$ 5.15	\$14.00						\$ 8.40
May.....			7.00						14.00
June.....	2.30	6.95	7.00	\$30.00	\$18.00	\$469.59	\$19.26		524.14
July.....	27.60								53.86
August.....	33.05	22.50	7.00						62.55
September.....	3.50				18.00				21.50
October.....	40.50		10.50						51.00
November.....	1.00								1.00
December.....	3.95	33.25			18.00				55.20
1895.									
January.....	6.20								6.20
February.....									1.35
March.....	1.35				18.00				18.00
April 1-15.....								\$120.05	120.05
Totals.....	\$122.70	\$67.85	\$45.50	\$30.00	\$72.00	\$469.59	\$19.26	\$120.05	\$937.25

ENGINEERING DEPARTMENT. DISBURSE- MENTS 1894.

Month, 1894.	Pav Roll.	Horse Hire.	Miscellan- eous Expense.	Abstract Work.	Printing and Stationery.	Total.
April 16-30	\$1,675.32	\$ 50.74	\$ 3.47	\$ 4.40	.....	\$1,733.93
May	3,345.00	105.00	2.40	30.72	.....	3,483.12
June	2,908.77	90.00	36.35	4.62	.....	3,039.74
July	3,509.48	90.00	84.68	4.00	.....	3,688.16
August	3 555.90	90.00	49.07	1.50	.....	3,696.47
September	3,477.60	135.00	85.02	50.50	.....	3,748.12
October	3,813.30	105.00	50.62	46.50	.....	4,015.42
November	3,492.90	105.00	80.08	13.50	\$ 30.07	3,721.50
December	3,363.30	105.00	45.52	126.00	810.68	3,950.50
January, 1895	3,164.40	105.00	29.78	.....	91.25	3,400.43
February	2,943.90	105.00	30.45	3.25	139.57	3,222.17
March	3,091.50	105.00	70.51	201.75	53.65	3,522.41
April 1-15	1,731.31	50.74	38.70	.....	16.98	1,837.73
Totals	\$40,072.68	\$1,341.48	\$616.60	\$486.74	\$542.20	\$43,059.70

ENGINEERING DEPARTMENT. MISCELLANEOUS EXPENSE 1894.

Month 1894.	Office Supplies. Repairs.	Blue Prints.	Tools. Instruments and Repairs.	Services. Labor. Extra.	Stakes. Survey.	Furniture.	Testing Brick.	Sewer Inspection. Boots.	Total.
April, 16-30.....	\$ 2.30	\$ 1.17							\$ 3.47
May.....	2.40	14.80							17.20
June.....	29.23	16.30	\$ 0.30	\$20.00					65.83
July.....	5.63	35.75	35.75						94.48
August.....	5.90	6.67	33.80		\$22.50				49.07
September.....	7.15		32.85			\$51.67			93.67
October.....	34.10	8.07	6.40			25.00			90.62
November.....	9.35		14.25		22.50		\$ 8.20		90.08
December, 1893.....		.47	23.15	4.25			8.80		45.32
January.....	33.70		73						39.78
February.....	9.25	2.00	13.20				1.75	\$3.60	30.45
March.....	1.60	4.26	50.75		2.50	8.90	3.50		70.51
April, 1-15.....			7.35		29.75				38.70
Totals.....	\$148.73	\$53.74	\$190.71	\$24.25	\$77.25	\$89.57	\$28.75	\$8.60	\$616.60

STREET AND ALLEY DEPARTMENT. DISBURSEMENTS 1894.

Month. 1894.	Pay Roll.	Horse Keep.	Miscel- laneous Expense.	Repairs.	Cross Walks and Bridges.	Street Repairs.	Sewer Repairs.	Tools.	Printing and Stationery.	Total.
April, 16-30.....	\$ 2,604.12	\$ 34.75	.....	\$ 24.40	\$ 32.15	\$286.78	\$ 290.83	\$ 4.89	.....	\$ 3,277.92
May.....	5,347.78	77.00	.....	27.35	219.45	93.86	136.45	49.45	.....	5,956.34
June.....	5,410.91	40.00	20.90	72.85	491.97	547.55	173.85	69.47	.....	6,956.90
July.....	7,033.79	30.85	.....	48.00	653.03	493.50	124.89	16.99	.....	8,399.95
August.....	5,409.74	77.00	4.00	25.90	1,516.12	108.92	14.73	7.75	.....	7,164.16
September.....	5,218.87	139.00	19.40	33.20	295.30	401.96	185.85	23.54	.....	6,267.12
October.....	5,138.32	81.00	.....	41.05	485.88	60.80	370.21	2.38	.....	6,179.64
November.....	4,501.88	81.00	60.00	106.15	479.08	127.62	161.84	9.23	.....	5,328.60
December.....	4,585.17	78.00	18.00	111.30	217.00	20.79	334.48	17.73	.....	5,382.47
1895.										
January.....	4,029.88	77.00	.....	128.03	725.48	1.90	220.85	30.20	.....	5,213.86
February.....	4,488.40	79.50	.....	52.60	450.40	300.00	688.80	52.53	.....	6,129.75
March.....	5,464.08	79.00	18.00	14.75	1,049.60	738.60	381.32	2.70	\$17.50	7,748.05
April, 1-15.....	3,727.18	39.50	.....	227.05	293.50	651.57	178.29	.....	.....	5,117.09
Totals.....	\$62,960.12	\$913.10	\$145.30	\$912.65	\$6,908.96	\$3,860.85	\$3,213.39	\$286.78	\$17.50	\$79,219.15

STREET AND ALLEY DEPARTMENT.

MISCELLANEOUS EXPENSE 1894.

Month. 1894.	Cleaning Vault.	Telephone Service. Rental.	Oil, Hardware.	Shoeing Horses.	Ground Rent, 11th and Troost.	Total.
April, 16-30.....						
May	\$5.00					\$ 5.00
June		\$18.00	\$2.90			20.90
July						
August				\$4.00		4.00
September.....		18.00	1.40			19.40
October						
November					\$60.00	60.00
December		18.00				18.00
January, 1895						
February						
March		18.00				18.00
April, 1-15.....						
Totals	\$5 00	\$72.00	\$4.30	\$4.00	\$60.00	\$145.30

BUILDING DEPARTMENT.**DISBURSEMENTS 1894.**

Month. 1894.	Pay Roll.	Horse Hire.	Office Expenses.	Totals.
April, 16-30.	\$ 249.14	\$7.25		\$ 256.41
May	514.33		\$ 0.15	514.48
June.....	476.53		.95	477.48
July.....	476.53		1.25	477.78
August.....	483.73			483.73
September	469.33		14.67	484.00
October.....	483.73			483.73
November.. ..	476.53		1.20	477.73
December.....	487.33		5.00	492.33
January, 1895.	476.53			476.53
February	462.13			462.13
March	476.53		2.00	478.53
April, 1-15.....	234.71			234.71
Totals.....	\$5,767.10	\$7.25	\$25.22	\$5,799.57

STATEMENT OF SPECIAL APPROPRIATIONS FOR THE FISCAL YEAR 1894.

No. Ord.	CONTRACTS.	Amount Appropri- ated. Balances.	Amount Expended.	Amount Charged Back.	Balance Unex- pended.
5,650	Street Signs, to purchase.....	\$1,200 00	\$ 875 20		\$ 325 80
5,723	Smoke Devices, to purchase for abatement of smoke.....	2,000 00	800 30		1,199 70
5,761	City Hall, to fresco walls, ceilings, etc.....	2,000 00	1,615 35		384 65
5,877	Intercepting Sewer, to construct from Eastern City Limits to Big Blue River.....	5,000 00	4,999 90	60 10	
	Footings.....	\$10,200 00	\$8,291 75	90 10	\$1,908 15
CONDEMNATIONS.					
2,400	Extend and establish College Ave. from Bernard Place to 15th St.....	\$ 46 12			\$ 46 12
2,402	Open and establish Liberty St. from Turner & Co.'s Add'n to 12th St.....	37 72			37 72
3,405	Open and establish 23rd St. from Charlotte St. to Grand Ave.....	78 94			78 94
3,902	Confirm verdict 23rd St. from Charlotte St. to Grand Ave.....	2 00			2 00
3,610	Open and establish Main St. from 40th St. to Grand Ave.....	69 40			69 40
4,181	Confirm verdict Main St. from 40th St. to Grand Ave.....	2 00			2 00
3,836	Open and establish Monroe Ave. from Barrett & Orr's Add'n to C. & A. Ry. tracks.....	3 90		\$ 3 90	
4,175	Confirm verdict Monroe Ave. from Barrett & Orr's Add'n to C. & A. Ry. tracks.....	1 00		1 00	
3,782	Open and establish 23rd St. from Fairmount Park Add'n to Madison Ave.....	5 80			5 80
4,063	Confirm verdict 23rd St. from Fairmount Park Add'n to Madison Ave.....	1 00			1 00
3,857	Open and establish 23rd St. from Terrace Place to W. & C. Subdivision.....	45 00			45 00
4,216	Open and establish Morrell Ave. from Court Ave. to Scarritt Ave.....	24 40			24 40
3,841	Confirm verdict Morrell Ave. from Court Ave. to Scarritt Ave.....	12 60		12 60	
4,405	Open and establish Lombard St. from Chautauqua Place to R. & C. Add'n.....	1 00		1 00	
4,616	Confirm verdict Lombard St. from Bell St. to State Line.....	36 00			36 00
5,071	Confirm verdict Lombard St. from Bell St. to State Line.....	3 25			3 25
4,882	Open and establish 13th St. from Flora Ave. to Vine St.....	78 00		78 00	
5,364	Confirm verdict 13th St. from Flora Ave. to Vine St.....	1 00		1 00	
	Amount forward.....	\$10,649 33	\$8,291 75	697 60	\$2,259 98

STATEMENT OF SPECIAL APPROPRIATIONS
FOR THE FISCAL YEAR 1894—CONTINUED.

No. Ord.	CONDEMNATIONS.	Amount Appropri- ated. Balances.	Amount Expended.	Amount Charged Back.	Balance Unex- pended.
	Amount Brought forward	\$10,649.33	\$8,291.75	\$ 97.60	\$2,259.98
4,972	Open and establish a boulevard along Independence Ave. and other streets	348.00	.....	.....	348.00
5,554	Confirm verdict No. 5,184 open and establish 11th St. from South Winfield Place to Agnes Ave	1.00	.....	1.00	.....
5,172	Open and establish Wyandotte St. from Milwaukee Ave. to 23rd St.	1.00	.....	.....	1.00
5,725	Confirm verdict Wyandotte St. from Milwaukee Ave. to 23rd St.	1.00	.....	.....	.....
5,233	Confirm verdict No. 4,635 open and establish 23th St. from Grand Ave. to Broadway	.75	.....	.....	.75
5,367	Confirm verdict No. 4,873 open and establish 14th St. from Oak St. to Locust St.	5.00	.....	5.00	.....
5,553	Open and establish College Ave. from South line Alexander Park to 18th St.	4.76	.....	4.76	.....
6,015	Confirm verdict College Ave. from South line Alexander Park to 18th St.	1.00	.....	1.00	.....
5,572	Confirm verdict No. 5,366, widen and establish 23th St. from Holly St. to S. W. Boulevard	1.00	.....	.....	1.00
5,985	Confirm verdict No. 5,527, open and establish Amie St. from Downing's Res'y Longview to Prospect	1.00	.....	.....	1.00
5,433	Confirm verdict No. 4,866, open and establish Alley North of 18th St. Quest's Add'n to Euclid Ave.	4.60	44.60	.....	.....
5,943	Confirm verdict No. 5,380, open and establish Alley bet. Chestnut and Kansas, 25th St. to 26th St.	1.00	.....	1.00	.....
5,951	Open and establish 11th St. from South Winfield Place to Agnes Ave.	1.00	.....	.....	1.00
6,174	Confirm verdict 11th St. from South Winfield Place to Agnes Ave.	1.00	.....	.....	1.00
6,228	Confirm verdict No. 5,989, open and establish Alley bet. 18th St. and 14th St. from Olive St. to Wabash	1.00	.....	.....	1.00
	Footings	\$822.44	\$4.60	\$110.36	\$707.58
	Total appropriations to be accounted for (and balances)	\$11,022.44	.....	.....	.....
	Total expenditures for the fiscal year 1894	.....	\$8,296.35	.....	.....
	Total amount charged back	.....	.....	\$110.36	.....
	Balance of appropriations unexpended. Over to fiscal year 1895.	.....	.....	.....	\$2,615.73

Respectfully Submitted,

H. P. LANGWORTHY, Secretary.

BOARD OF PUBLIC WORKS.

DEPARTMENT OF ENGINEERING.

BOARD OF PUBLIC WORKS,
DEPARTMENT OF ENGINEERING,
April 15, 1895. }

To the Honorable Board of Public Works.

GENTLEMEN :

I beg to submit the following report of this department for the fiscal year ending April 15, 1895.

Owing to the general depression in nearly all industrial pursuits, the amount expended through or under the direction of this department was considerably less than during the previous year, but it was largely in excess of the amount expended in the fiscal year 1892, as shown by the following :

**COMPARATIVE STATEMENT OF PUBLIC WORK COMPLETED
DURING FISCAL YEARS 1892-3, 1893-4, 1894-5.**

Nature.	Amount.		
	1892-3.	1893-4.	1894-5.
Paving streets.....	\$219,185.24	\$522,485.65	\$403,024.20
Paving alleys.....	3,512.04	8,244.56	3,016.47
Curbing.....	33,185.94	36,098.03	11,454.33
First class sidewalks.....	29,466.37	28,643.08	20,947.20
Plank sidewalks.....	7,312.79	8,380.95	3,524.15
Repairs plank sidewalks.....	8,891.44	11,627.81	6,748.08
Repairs first-class sidewalks and curbing.....	945.06	2,588.24	898.29
Grading streets.....	16,970.40	36,919.41	11,006.34
Grading alleys.....	1,015.23	5,101.38	1,456.18
District sewers.....	20,456.08	63,633.00	81,834.41
Public sewers.....	14,973.24	1,724.49	4,999.90
O K Creek sewer.....	27,641.89	41,838.77	
Sundry public work (appropriation).....		1,655.13	1,615.45
Sundry public work (voucher).....	619.44	316.66	1,970.25
Cleaning and sprinkling streets.....	2,364.18	25,522.65	44,715.00
Bridges and viaducts.....		15,300.00	
Totals.....	\$347,009.43	\$810,189.76	\$597,641.69

The salaries and expenses of the department, including the pay rolls of the engineer and watchman of the steam road

roller, and exclusive of supplies furnished on requisitions by the Purchasing Agent, amounted to \$43,474.91. The same items for the fiscal year 1893-4 were \$49,879.44 and for 1892-3 they amounted to \$59,025.70. The amount of work required of this department is governed by the amount expended under its direction only to a limited extent. Inspectors on contract work are only paid for the days actually employed; but both the field engineers and draughtsmen are often employed for a considerable time in making surveys, plans and estimates for work that, for one reason or another, is not finally executed until a year or more afterwards.

The following statements, taken from the reports of the heads of the separate divisions, show in a general way the work performed during the past fiscal year.

DIVISION OF FIELD WORK.

The work done during the year as reported by the field parties is as follows:

Line and grade have been given for 36,277 lineal feet of new curbing.

Line and grade have been given for resetting 74,320 lineal feet of old curbing.

Line and grade have been given for 5,145 lineal feet of first-class sidewalks.

Line has been given for 2,562 lineal feet of second-class sidewalks.

Line and grade have been given for 47,275 lineal feet of pipe sewer.

Line and grade have been given for 10,771 lineal feet of brick sewer.

Line and grade have been given for 54,390 lineal feet of paving.

Line and grade have been given for 20,306 lineal feet of grading.

Profiles taken amount to 346,978 lineal feet. Miscellaneous surveys amounting to 291 in number have been made,

including a survey of the water shed of Goosoneck Creek and a survey for the continuation of O. K. Creek Sewer to the Missouri River ; and surveys have also been made for the purpose of locating and referencing street lines in the portions of the City where the lines are in doubt from conflicts in the recorded plats. In addition to the above, and the many minor surveys made for the purpose of relocating and rebuilding catch-basins and manholes, the field parties have investigated by gauge readings the volume of discharge in the O. K. Creek and Main street sewers; they have also assisted in the testing of cements and paving brick, as well as the tests made of the smoke consumers placed in the City Hall.

Surveys have been nearly finished of the south $\frac{1}{4}$ Section 7, southwest $\frac{1}{4}$ Section 33, the northwest $\frac{1}{4}$ Section 6, and that part of the City from Prospect avenue east and Independence avenue south to the City limits.

In a large proportion of the additions, and especially the older ones, the additions as laid out on the ground do not conform with the recorded plats. These discrepancies can generally be determined in that part of the City which has been mostly laid out within the last ten years, as a sufficient number of the original stakes can generally be found to locate the lines ; but these evidences are rapidly becoming obliterated and unless they are referenced the correct location of street and alley lines will soon become difficult. Surveys in the older parts of the City are often difficult and unsatisfactory on account of the fragmentary and unconnected character of the referenced lines, and the inadequacy of the records. In many cases the chief reliance must be placed on records obtained from private surveyors.

The object of these surveys is, as far as practicable, to prevent this condition from obtaining where lines may still be located with confidence, and to establish a system of survey lines, thoroughly referenced so that surveys for the improvements of streets and other purposes may be referred to these lines and connected with them, and in this way gradually per-

fecting the records and bringing uniformity to the different surveys made by the department.

DRAUGHTING DIVISION.

Plans and approximate estimates for all paving work are prepared by the draughtsmen, who also compute and record final estimates for same when completed. Thirty-six plans and approximate and final estimates on thirty-eight streets and five alleys were made during the fiscal year 1894-5.

During the same period thirty grading plats with profiles, and twenty final estimates (streets eleven, alleys nine) were prepared, as also assessment rolls for the eleven streets graded.

Final estimates and taxation areas in Sewer Districts Nos. 89, 90 and 176 and in Joint Sewer Districts Nos. 94 and 104 were also computed.

Maps necessary to start condemnation proceedings in eight cases were prepared.

The seventy-seven ordinances establishing grade and widths of sidewalks which were passed during the fiscal year were duly posted in the appropriate records. Work was also done on about one hundred cleaning and sprinkling apportionment sheets. Much progress has been made towards securing a complete and accurate set of City maps, a need long felt. This work should be pushed to an early completion, as this would minimize time, labor and probability of error in all cases where same are used.

The necessity of reproducing the original sewer records has forced a start in that direction, but progress has been unavoidably slow, owing to their incompleteness and the lack, in many cases, of field notes; thus requiring special surveys to fix depth and location.

The 465 field books of the department have been gone through separately and an index compiled of their contents. The work of arranging this alphabetically is now proceeding and will probably be completed during the coming fiscal year.

CLERICAL DIVISION.

WORK PERTAINING TO ORDINANCES AND RESOLUTIONS.

Of all ordinances and resolutions presented to the Common Council, ninety-five per cent originate in this department. During the fiscal year 1894, 500 ordinances were enacted and 175 resolutions adopted, while at least 100 similar documents were still in the hands of various committees at the expiration thereof. Of ordinances passed and resolutions adopted, the great majority relates to public improvements, and all of these are recorded in full in suitable records. Business street paving ordinances and first-class sidewalk resolutions are published from this office as by law provided. These notices aggregated about twenty-five during 1894 and will show an increase during 1895, as the new procedure in the matter of uniformity, etc., for first-class sidewalks is at present but in its inception.

WORK PERTAINING TO PETITIONS AND REMONSTRANCES.

Our City Charter requires the certificate of the Board of Public Works on all petitions or remonstrances relating to public improvements and requiring a majority of front feet of resident real estate to render them effective. The routine work of preparing canvass sheets from the Assessor's records, examining into questions of residency and non-residency, totalling of front-ages, examination of signatures and submitting results to be verified by the Board is all done here, as well as the copying, for future reference, of all such petitions and canvass sheets. One hundred and fourteen such petitions and remonstrances, representing 289,721 lineal feet, or almost exactly $54\frac{1}{2}$ miles of property, were so treated during 1894. While the large figures quoted give some idea of the amount of work involved, they in no wise indicate the difficulty and labor of obtaining results free from controversy and satisfactory to all parties interested. The general ordinance relating to the construction and repair of frame buildings within the fire limits requires the consent of

certain property owners before permits may be issued, which consent must be certified to as adequate by the City Engineer. Of such petitions 185 were canvassed during 1894. Street railway and vacation petitions are now few and far between, but when presented are dealt with here.

WORK PERTAINING TO CONTRACTS.

The letting of contracts for public improvements, except when otherwise provided for by ordinance, is within the peculiar province of the City Engineer. If the work to be done consists of sidewalks or curbing, the Engineer publishes notice (sixty during 1894) to property owners that they may do the same privately within a certain time. Before contracts can be let for any species of public work, notices to contractors (108 during 1894) are published by the Engineer. Both such kinds of notices are verified by affidavits of publication filed and recorded in this office. One hundred and twenty-eight contracts for public work were awarded during 1894, bids for the same (running from one to ten per contract) registered, recorded and filed and the contracts themselves, when confirmed by the Common Council, were also recorded, with all endorsements, and filed in the department.

WORK PERTAINING TO SPECIAL TAX BILLS.

The preparation of all Special Tax Bills issued in payment of public improvements devolves upon the clerical force of the Engineering Department. A piece of work having been completed and the cost thereof computed and estimated, the Board of Public Works is notified that the same is ready for acceptance. A statement of computation is then prepared, as are also apportionment sheets in triplicate: one for the department, one for the Board, and one for the City Treasurer. The preparation of these sheets requires an accurate description of all property taxed, the superficies, frontage or valuation (according to the kind of work) of each lot or parcel of land, and the names of owners as taken from the Assessor's books, as well as

the necessary calculations to divide the cost as by law provided. Special Tax Bills are then prepared, registered in full and indexed by lot or tract number; and an order for delivery of same written. All of these are then submitted to the Board for verification and approval, and at the proper time receipts taken in duplicate from the party entitled to the tax bills after the same have been certified to and signed; and notice of their issue is duly published. A list of names of parties owning property affected is then prepared and furnished to the party receipting. All of the papers (except the tax bills themselves and two of the three apportionment sheets) above enumerated, as well as all assignments of tax bills, are recorded and filed for preservation here. The City Auditor is also notified in writing of the issue of each batch of bills and furnished with a statement indicating the number and amount of each bill, and how same are payable. Twenty-four thousand and seventy-three Special Tax Bills were issued during 1894, involving 30,613 separate signatures (over 2,100 of the bills being on the instalment plan). Incidental work included the recording of 329 notices of issue. It is the duty of one clerk to take charge of the Special Tax Books, satisfy on records and indexes all tax bills paid on statements furnished by the City Treasurer, make immediate entry of all notices of suits filed, and answer such inquiries relating to tax bills as citizens may make.

WORK PERTAINING TO CONDEMNATION PROCEEDINGS.

Attendance on condemnation juries in Mayor's and Circuit Courts is required of this department. When such a jury is empaneled the condemnation clerk goes with it over ground condemned, attends its subsequent meetings as required, makes any calculations called for and puts the verdict in legal shape to be rendered into court, describing all property damaged or benefited, stating its owner or claimant, and the amount to be paid therefor or assessed against the same, as the case may be. Eight such verdicts were rendered during 1894.

WORK PERTAINING TO INDEXING.

With the multitude of documents and records required to be kept by the department, a complete system of indexing has been found an absolute necessity. To the Special Tax indexes allusion has already been made. All ordinances and resolutions recorded are also indexed by number and nature in a special set of books kept for the purpose, as are also bids, contracts, etc. An abstract of the essential parts of all ordinances and resolutions pertaining to tax bill work, of grading and condemnation proceedings, and of appropriations and estimates, is further posted daily in a series of "Work Record Indexes."

WORK PERTAINING TO CORRESPONDENCE AND MISCELLANEOUS.

The bulk of the departmental correspondence relates to the assessment of Special Tax Bills and is dealt with daily by the clerk in charge of the tax indexes. Notices, however, have to be sent at irregular intervals to contractors, assignees of tax bills, property owners and other persons, most of which is done by the use of printed postal cards. The miscellaneous work includes the preparation of pay rolls and monthly bills, the copying of quit-claim deeds, legal opinions and other documents of importance, and such other various duties as invariably fall at times to any clerical force.

DIVISION OF CURBING AND SIDEWALKS.

The division of curbing and sidewalks has charge of the construction, reconstruction and repair of all sidewalks and curbing.

The force of employees consists of one superintendent, one clerk and four inspectors.

In the repair work the City is divided into three districts. One inspector is assigned to each district, who is required to notify the property owners to repair defective sidewalks within ten (10) days; when such owners cannot be found or refuse or

neglect to repair within the time specified, the work is then turned over to the City contractor for the district in which the walk is situated, who is paid in Special Tax Bills, issued monthly, for work done.

During the fiscal year 8,249 notices have been issued to property owners to repair sidewalks. Of this number, 6,141 were complied with, 2,108 were done by City contractors, for which tax bills were issued amounting to \$7,641.37. The approximate cost of private work being \$10,000.00.

The construction of new curb and sidewalks is done by property owners under permit from the City Engineer, and such work as is not completed in the time specified by ordinance, is done under public contract and tax bills issued in payment for the same. We have issued to property owners 418 permits for curbing.

The first-class sidewalks constructed by property owners consist of 97,312 sq. ft. at an approximate cost of \$18,616.40; by public contract, 13,408.60 sq. ft. at a total of \$2,307.80, for which seventy-three tax bills were issued; the total amount of first-class walk being 110,720.60 sq. ft., costing \$20,987.20.

The property owners constructed 13,560 lineal feet of curb at an approximate cost of \$5,819.50. The various public contracts amounted to 11,822.50 lineal feet, at a cost of \$5,638.83, for which 273 tax bills were issued. The total curbing constructed amounted to 25,382.50 lineal feet, costing \$11,458.33.

The plank walk constructed consisted of 13,521.50 lineal feet of five-foot walk, which cost \$3,528.15; of this amount the owners laid 4,392.20 lineal feet, at an approximate cost of \$1,339.65, and the various public contractors laid 9,129.30 lineal feet, costing \$2,188.30, for which 231 tax bills were issued.

The total cost of all work done under the direction of this division during the fiscal year amounted to \$53,615.05.

PAVEMENTS.

Walnut street from Fourth to Fifth street was the only street paved with stone blocks during the year, and only one street was paved with cedar blocks, viz., West Ninth street from Mulberry street to the State Line. All the asphalt pavement put down was laid by the Barber Asphalt Paving Company, and so far as quality of material and workmanship are concerned, it is highly satisfactory, but the opinion is entertained by many who are well qualified to judge, that the same could be furnished at a considerably reduced price and still leave a liberal profit to the contractor.

BRICK PAVEMENTS.

There were laid during the year 48,369.2 square yards of brick pavement. On account of the unsatisfactory condition of some of the pavements previously laid, and the prevalence of widely different opinions as to what constituted a good paving brick, Judge John C. Gage, member of the Board of Public Works, advised the preparing of new specifications, prescribing certain physical tests which all brick should be capable of enduring before being accepted as street pavers.

Acting upon this advice, I prepared such specifications, which were approved by your honorable body on the 17th day of August, 1894. In prescribing these physical tests, I took into consideration the advantage to Kansas City which would be derived from the use of the product of local manufactories, and that these yards had quite large stocks already on hand at that season of the year; for which reasons it did not seem desirable to specify the most severe tests which choice lots would sometimes endure, but rather what I considered that either of the several plants within a reasonable distance from the City could with skillful management produce at a moderate cost.

Four separate tests were provided for, viz.: Absorption, specific gravity, resistance to abrasion or impact and transverse breaking strength, the last of which, however, has not been

applied for lack of suitable apparatus for making it. At the time these specifications were adopted there was no great necessity for making this test, for the bricks offered for pavements were so highly vitrified that there was no doubt concerning their transverse strength, but a series of abrasion tests made on both brick taken up from pavements that had been for some time in use and on new ones offered, showed what had been demonstrated in other cities, that excessive vitrification makes a brick strong to resist a carefully applied load, but it is also apt to leave it brittle or glassy and easily chipped to pieces from sharp, quick blows.

The makers find that by certain changes in their mixtures and methods of burning they can somewhat reduce this brittleness, but there is danger that in so doing they will at the same time reduce their crushing and transverse strength to a harmful extent. For this reason there is a growing necessity for our being prepared to test for this very desirable quality.

Next to the qualities of strength and toughness which can be determined by the physical tests above mentioned, is that of uniformity. One poor brick in a pavement is quite sure to cause the ruin of at least two others adjacent to it. The lack of this quality is the most discouraging feature of brick pavements, because it is in too many cases impossible for the inspectors to separate the defective from the acceptable bricks. Both, from outside appearance, are perfect; yet the inside of one is a thoroughly compact mass, while the other is so laminated and loose that, as soon as the outside shell or skin is broken, the whole is easily crumbled to pieces.

Although by so doing many good bricks will be rejected, the only way to insure good results is to reject altogether such lots of brick as are found to contain a large percentage of these concealed defects.

MACADAM.

With a view to eliminating some of the objectionable features of the common limestone construction, Independence

avenue from Woodland avenue to Walrond avenue, the Southwest boulevard from Main street to Broadway and Park avenue from Twelfth to Eighteenth street were macadamized by placing on a limestone base a wearing surface three inches in thickness of hard silicious stone; that used on Independence avenue came from the State of Wisconsin and is known locally as Berlin granite, and that for the other two streets from Carter county, this State, and is known as Carter county granite. The cost of Independence avenue improvement was \$1.24 per square yard, including Colorado sandstone crosswalks, and no maintenance after completion. For the Southwest boulevard and Park avenue, \$1.04½ and \$1.07, respectively, including two years' maintenance and sprinkling. Neither of these improvements have been in use long enough to show whether or not they are so much superior to the common macadam as to justify the additional cost.

DISTRICT SEWERS.

In my opinion, Kansas City is fortunate in that the "combined" and not the "separate" system has been adopted in the construction of all district or local sewers.

In the earlier construction, some of the "dead ends" or branches which receive no storm water, except the little entering through house connections, were built too large for economical flushing; but this fault has been corrected in the more recent designs.

The public sewer in Nineteenth street between Holmes street and Locust street, and in Locust street from Nineteenth street to the O. K. creek sewer has less than half the capacity necessary for draining the area now tributary to it, which causes much inconvenience to the inhabitants, if not actual damage to health whenever heavy rains of any considerable duration occur.

To relieve this condition, a plan has been submitted for a joint district sewer in Nineteenth street, from Holmes street to the alley east, and thence south in said alley to the O. K. creek sewer.

The outlet to Sewer District No. 40 is another somewhat similar case to which my attention has been called, but I have not as yet been able to devote to it the study necessary for designing the best plan for relief.

The district sewers of recent construction, which have storm water catch-basins or inlets, have been given a theoretical capacity, when running full, of two cubic feet per second per acre drained, which amount is equal to a continuous rainfall of two inches per hour, with no deduction for evaporation, seepage or retention.

Sewers of this capacity have now been in use long enough to demonstrate that they are not too small for Kansas City conditions, excepting, of course, the possible occurrence of a "cloud-burst," which is a contingency for which it would be gross extravagance to attempt to provide.

Although in very few other cities are sewers proportioned for such an amount of storm water as here, the few data we have bearing upon the subject quite strongly indicate that the capacity given is not excessive when applied to small districts. On small areas the water reaches the sewers from all parts very quickly, therefore extremely heavy falls of short duration should be provided for; but on large areas much more time is required to concentrate the flow. The heavy falls of long duration, therefore govern in this latter case, requiring less capacity per acre for the larger sewers.

It seems that little or no reduction in the acre capacity of large sewers (excepting in the case of O. K. creek and possibly a few other public sewers) has been made, and very few measurements of maximum flow in the sewers have yet been made to determine at what rate the acre capacity can be safely reduced, as the area of district drained increases.

Gauges are being placed in a few sewers located in well built up portions of the City and a record of the flow from rainfalls of different intensities has been commenced; but this record must be extended over a considerable period of time before it becomes a reliable guide for the purpose required.

In the meantime, we can only judge of the capacity required by the experience of other cities and the fact that many small and medium-sized sewers have a theoretical capacity of two cubic feet per second per acre and that of the O. K. creek sewer is only about five-eighths as great, and so far each size has been found sufficient.

The sanitary condition of the district sewers would doubtless be greatly improved if all "dead ends," especially in the higher districts, could be supplied with automatic flush tanks, thus insuring regular and systematic flushing.

When the City obtains control of the water works plant, arrangements should be made for attaching these flush tanks to all dead end branches which have been found offensive, and for a more liberal use of them in future construction.

SEWERAGE OF THE EASTERN PORTION OF THE CITY.

There has been for some time past a demand for sewers in a part of the territory between Ninth and Fifteenth streets, Agnes avenue and the eastern City limits, but the proper point for the ultimate disposal is so far away from this section, that it was unwise to attempt to prepare plans for it without at the same time considering, at least in a general way, all other areas which in the future might need to join with it in the use of a common outlet. The natural drainage channel for this district is Goose-neck creek, which empties into the Big Blue river about one and a half ($1\frac{1}{2}$) miles above its mouth. The area tributary to this creek is about 3,350 acres, of which only about 1,110 acres are within the present City limits.

It seems safe to assume that the permanent improvement of this creek channel by walling up and arching over will not be necessary for a number of years to come, if only the offensive sewerage can be kept out of it. This can be accomplished by the use of interceptors laid near and generally parallel with the creek, so proportioned and arranged as to receive the dry weather flow from the district sewers, including what ground or spring water may find its way into them,

and, in addition, the flow from very light rains, such as constitute over ninety per cent of the storms occurring in Kansas City; and having the excess from heavy showers to overflow into the creek channel and follow its natural course towards the river.

A considerable time and study have been given to determining the most judicious capacity to be given to the intercepting sewers, so as to prevent the discharge of offensive matter into the creek channel and at the same time avoid the expense of unnecessarily large sewers.

In order to design a harmonious system, it was necessary to adopt some rule or formula by which the different sections of the interceptors could be adjusted to the duty required of them, for upon such adjustment, very largely will depend the sanitary value of the intercepting system.

After a careful study of the local rain records, topography, soil, etc., gauging the flow of some of our most important sewers, and consulting the recognized authorities on the subject, it was decided to adopt a slightly modified formula of the well known Burkli-Zeigler formula, which has been pretty thoroughly tested in a number of eastern cities, for proportioning combined and storm-water sewers. Although not as complete in itself as might be desired, yet on account of its simplicity, the satisfactory results obtained from its use as above stated and the ease with which it can be modified in detail to suit local requirements, I consider it the best general rule of the kind for our purpose.

The adopted form is as follows :

$$Q = r \sqrt[3]{s} A^2 + c A$$

In which

Q = Required capacity of interceptor in cubic feet per second.

r = Maximum amount of storm-water, measured by rate of rainfall in inches per hour, which being collected by the district sewers will pass into the interceptor without overflow.

s = The average slope of the sewered district toward the interceptor in feet per thousand.

A = Area in acres of the district drained.

c = The maximum dry weather flow of sewage and ground water in cubic feet per second per acre.

By substituting the numerals adopted to the conditions near the head of Gooseneck Creek, for the letters r , s and c , the formula becomes

$$Q = 0.25 \sqrt[3]{30 \times A^2} + 0.02 A$$

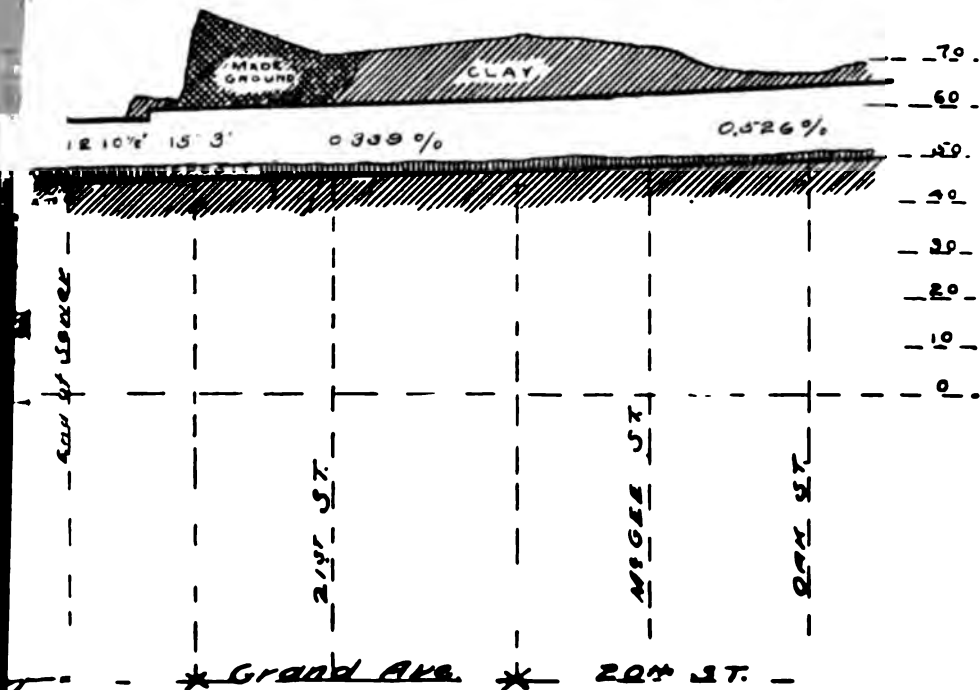
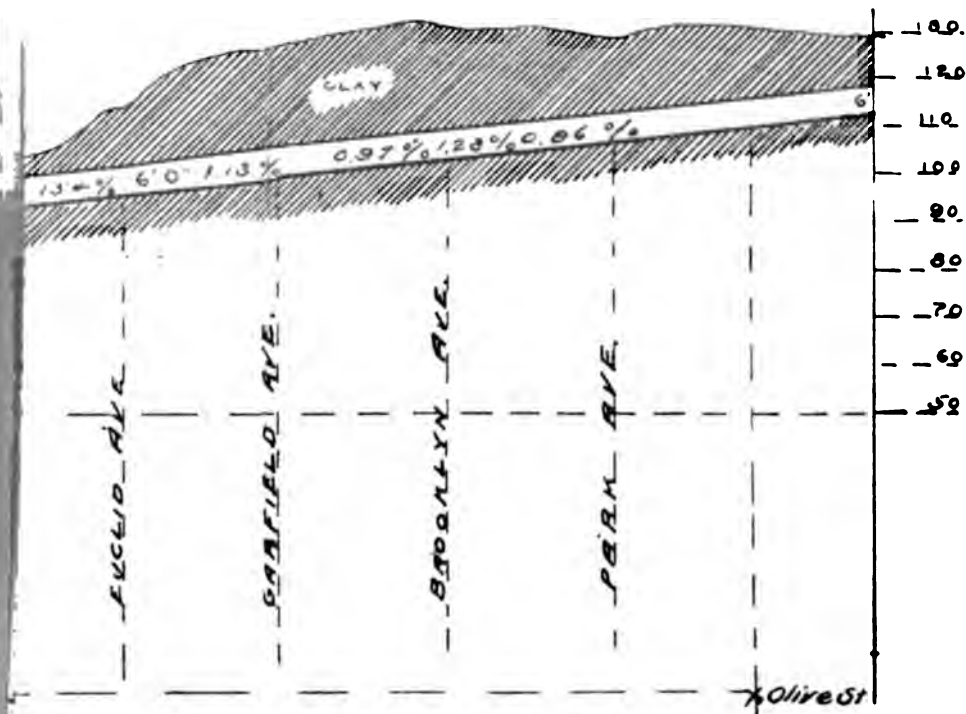
The value of " s " will be somewhat modified as we go farther down the creek and the value of " c ," which was determined from gauging the flow in the Main street sewer, can safely be reduced twenty-five per cent or more when applied to large areas.

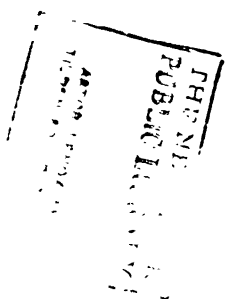
When the storm water from a large district is collected into one "combined system" sewer, like in the O. K. creek valley, before being intercepted, the first washings from different parts of the district arrive at such irregular intervals during heavy rains, that they cannot be as completely separated from the cleaner water which follows, as can be done when the interceptor extends too near the head of the drainage area and intercepts the district sewers more nearly in detail. But, on the other hand, when the large sewer overflows into the creek, it is with such a volume that the little offensive matter contained in it is very soon carried over to the larger creek or river. For this and other reasons, which I will not here enumerate, the interceptor for a very large sewer like the O. K. creek can safely be given much smaller capacity, in proportion to the area drained, than one which intercepts a moderate sized district sewer near the head of the drainage area.

The formula above described in itself provides a variable ratio for interception from different sized districts, but other elements than the slope of the ground and area drained, each peculiar to the district or stream under consideration, should be given their proper value in the final adjustment of an inter-

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— main sewer —





cepting system ; therefore neither this nor any other similar rule should be applied blindly to all cases alike, but only after a careful study of each particular district, and then as a relative rather than an absolute guide.

That portion of the area drained by the middle or Fifteenth street branch of the creek located within the present City limits, has been subdivided into eight districts for local sewer purposes, and interceptors designed according to the above outlined method, as far as the intersection of Fourteenth street and the eastern City boundary.

The City not being in control east of this point, is unable to issue Special Tax Bills in payment for a sewer extending to the Big Blue or to the Missouri river, and the available funds from the general revenue being insufficient for constructing one of the capacity which will be required, when the whole drainage area is improved; therefore, the most practicable expedient for supplying temporarily the needed outlet for this suburban district is to lay a small pipe outlet sewer from Fourteenth street and Cleveland avenue to a connection at Ninth street and Fairview avenue with the one laid last year from Cleveland avenue near Independence avenue to the Blue river for the use of Sewer District No. 89.

It is desirable that this work should progress with the least possible delay in order to allow those districts which are badly in need of and ready to build them an opportunity to construct their local sewers during the present season.

SEWERAGE DISPOSAL FOR THE O. K. CREEK VALLEY.

The question of the extension of the O. K. Creek sewerage system, has been discussed to some extent during the year; and some field work has been done at odd times during the winter, by the aid of which a map and profiles have been compiled showing in a general way the topographical features which must be considered in the solution of the problem. This problem has been acknowledged to be one of vital importance for many years, and each City Engineer has doubtless

investigated and at least in a general way, satisfied himself as to how it should be solved. The records of the office show quite clearly the work so far as they have been constructed, but little is found showing at all in detail what has been proposed for the final completion of the system, although some of the annual reports of former City Engineers show in a general way the plans which they considered best suited to the conditions. The work done has been sometimes criticised by the public, it seems to me rather harshly, considering the conditions under which it was executed. True it is that the first definite plan was abandoned after several thousand dollars had been expended and another radically different design adopted. It is therefore, but natural, that the public should infer that if one plan was right the other must be wrong ; but it should be remembered that when the first plan was adopted, Twenty-third street was the southern boundary line of the City and the Engineer could not, if he had desired, have entered upon the construction of a sewer of sufficient capacity to receive the storm water from the whole water shed of the valley ; neither should we forget the changed condition of Kansas City in the year 1886, when it was decided not to continue to its outlet this intercepting sewer as originally designed. In his report for the year 1886, the City Engineer (Mr. John Donnelly) recommended a closed sewer to take the place of O. K. Creek east of Baltimore avenue, and outlined his reasons for it as follows :

“The simple value of the land now occupied by O. K. creek, placing it at forty feet wide and extending from Grand avenue to Brooklyn avenue, estimated at \$75.00 a front foot, amounts to \$150,000, almost enough to pay for the main sewer. A large share of the cost should certainly be borne by the property owners in the immediate vicinity of the present creek channel, who would be most benefited.”

This large sewer has been constructed, excepting the portion between Grand and Baltimore avenues, substantially as was then recommended, but neither the creek channel thus re-

claimed nor the adjacent lands which were specially benefitted, were assessed for such special benefits. This fact as a precedent seems to stand in the way of an extended application of the present Charter provisions for the construction of public and joint district sewers; considering the obstacles in the way of procuring funds sufficient for such extensive public sewer construction, this feature of the work seems now to have been a mistake.

The general features of the former plan, as stated in the annual report of the City Engineer (Mr. Wm. B. Knight) for the year 1883, were as follows :

“The construction of an intercepting sewer north of, and generally parallel to O. K. creek, but located generally in the public highway, and extending, so far as at present contemplated, from Campbell street to a temporary outlet at Turkey creek, just north of the bridge on the country road. This sewer to be proportioned to carry off the flow of sewage proper and a small quantity of rainfall. Storm-water overflows to be constructed at a point where the main sewers are intercepted, and the rain water thence conducted in closed sewers, or open conduits, further south and discharged into O. K. creek.”

From a sanitary standpoint, the two plans have substantially equal merit, and doubtless if the sum spent on the present large sewer had been expended in the construction of properly proportioned interceptors, O. K. creek would have been relieved of offensive sewerage; yet the entire disappearance of the creek channel east of Grand avenue can hardly be considered a cause for much regret.

My own examination and study have been confined to the territory west of Grand avenue with a view to fully utilizing that which has already been built, and at the same time looking to the ultimate complete and satisfactory disposal of the sewage of the whole valley.

Fortunately the best method of final disposal is so plain that it may be considered almost an axiom and merely stated. With the Missouri River only two miles from the mouth of the

creek and topography favorable to leading the sewage from more than eighty per cent. of the valley into it, by gravity; dilution in that stream is the only disposal to be at all seriously considered.

The extension of the present large sewer down the O. K. and Turkey Creek channels to the Kaw River, would effectually dispose of the question if the sewer was made large enough to carry all the sewage and storm-water that would ever reach it and strong enough to work under the head that would be induced by the storm-water meeting back-water from the river, which during the higher stages, sets back to about Jefferson street; and provided further, that the Kaw did not in time become so polluted as to necessitate the exclusion of sewage from all streams and conduits emptying into it.

Such a sewer would cost several hundred thousand dollars to begin with and then when the time came for abating the pollution of the Kaw, another large expenditure would be unavoidable. Believing in the future dangerous pollution of the Kaw if the present system of the disposal of the Packing House refuse continues, and grows, whether this sewer empties into it or not, and that then both sewage and the other waste will be excluded by law, I decided that only such plans should be considered as would provide for conducting ultimately all offensive sewage to the Missouri River.

This conclusion is not new nor essentially different from what has been arrived at by some of the former City Engineers who have given the subject careful consideration, as may be seen by reference to their annual reports.

A detailed description of the different steps necessary to the development of a plan for this work would occupy too much space in this report, so I will merely outline the more important conclusions arrived at, viz :

The outfall sewer, extending across the west bottoms to the Missouri River, should be laid as high as the grade of the streets through which it passes will permit, to avoid unnecessary obstructions from back-water; but with sufficient fall to

prevent silt deposits. When these requirements are satisfied we find that at Turkey Creek and Twenty-fifth street the inside bottom or flow line of the sewer will be about nineteen feet above the City directrix or not less than ten feet above the low water surface of Turkey Creek. Therefore in order to deliver the sewage into this outfall sewer without pumping, it must be diverted from the O. K. Creek channel at a still greater elevation. Our surveys show that the lowest point at which the creek or large sewer should be intercepted is at the east end of Belt Line avenue, near the intersection of Wyandotte and Twenty-third streets.

If funds are found too limited for continuing the large sewer from its present mouth to Belt Line avenue before intercepting, the head of the interceptor could be placed in Walnut street just south of the creek channel. In this case, it would be desirable for the interceptor to follow the south bank of the creek from Walnut street to Belt Line avenue to avoid the deep excavation necessary to laying it in Walnut and Twenty-third streets. The grade of the sewer should be laid low enough to allow it to pass under the creek at Wyandotte street, thence by way of Belt Line avenue, Twenty-fourth street and the Southwest Boulevard and Twenty-fifth street to the head of the outfall sewer at the interception of Twenty-fifth street and Fairmount avenue. At this point a "sand catcher" or small covered settling tank should be built for arresting coarse sand, small stones, etc., which might lodge in the outfall sewer at times when its current was slackened by the back-water from extreme high stages of the Missouri River.

If it is found necessary or expedient to construct the interceptor in advance of the outfall sewer, a temporary outlet can be made into Turkey Creek at this point. These sewers should be proportioned so that in addition to all the sewage and groundwater reaching them when the district is fully built up, they will receive the water from very light rains and some of the first wash from heavier ones.

Judging from the experience of other cities and the gang-

ings of the Main street sewer, and of O.K. Creek below Twenty-third street, which have been made during the past winter, I would recommend for the interceptor a diameter of about 5 ft. 7 in. at Twenty-fifth street and Fairmount avenue, and about 5 ft. 3 in. at the east end of Belt Line avenue. A sewer of this size with a fall of one in 400 (which is the rate which should be adopted) when carrying seven times the present dry weather flow would only be taxed to less than one-third of its maximum capacity. The outfall sewer having a fall of only one in nine or ten hundred, should be elliptical in section, and about 6 ft. x 7 ft. in diameter.

For lack of time a complete detailed estimate of the cost of this work, including "Automatic Regulators" for the larger intercepts, settling tanks, etc., has not been made; but a fair approximation would be for the outfall sewer \$110,000.00 and for the interceptor, if continued up to Walnut street, including regulators and other special construction, \$65,000.00; or allowing for contingencies, a total of about \$200,000.00. If the large sewer were continued to Belt Line avenue and the interceptor carried from thereon, the cost would be greater, but the final result would doubtless be more satisfactory.

In recommending this project, the fact has not been ignored that there will remain, after these two sewers have been completed, several hundred acres of the drainage area lying too low to be drained into them without pumping, and while the field surveys have not progressed far enough to allow me to indicate the location or size of the additional sewer and pumping station which may in time become necessary for the completion of the system, I have considered them in a general way in connection with the outfall sewer and find that when the time comes for separating the sewage from this low ground from the water in Turkey creek, a small pumping station can be erected adjacent to the Turkey creek water works pumping plant, and lift it from a low level interceptor into the outfall sewer at a comparatively small cost.

As it becomes expedient to continue the large storm-water

sewer below the head of the interceptor, it should follow generally the channel of the creek. The circular form could then be abandoned and the section changed to a slightly concaved bottom between parallel bench walls and so proportioned that its roof at any particular point may be either flat or arched, or left off entirely, depending on the nature of the improvements to be made on the ground through which it passes. A portion, at least, of the cost of this storm-water channel should be borne by owners of the land reclaimed or benefited.

I may add that if nothing more is done this year in the O. K. creek valley, the channel of the creek for a distance of about 1,200 feet below the present mouth of the sewer should be deepened, so as to make a free outlet for the sewer. The flow line of the sewer at its mouth is about three feet below the bed of the creek, the result being the same as if a three-foot dam were built in the sewer's mouth, viz.: a heavy deposit in the bottom of the sewer, as shown by the profile, extending nearly back to Harrison street and reducing very materially the capacity of the sewer.

STREET PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.

ASPHALT.

Street.	From.	To.	Former Pavement.	Thickness Inches.	Foundation.	Lineal Feet.	Square Yards.	Cost per Sq Yd.	Cost.	Bills on
Fourth St.	Main St.	Walnut St.	Cedar Blk	2	2 in. bituminous concrete on old concrete.	292.60	1,559.40	\$2.45	\$4,192.41	9
Eleventh St.	Garfield Ave.	Olive St.	None	2	4 in. hydraulic concrete.	896.10	8,720.90	2.50	9,302.95	12
Grand Ave.	N. line Thirteenth St.	N. line Ninth St.	Cedar Blk	2	2 in. bituminous concrete on old concrete.	1,772.20	12,774.00	2.45	33,468.49	79
Grand Ave.	N. line Thirteenth St.	N. line Twentieth St.	Cedar Blk	2	2 in. bituminous concrete on old concrete.	8,482.00	21,275.90	2.65	56,890.87	191
Seventh St.	Prospect Ave.	Walrond Ave.	None	2	4 in. hydraulic concrete.	1,928.80	7,910.40	2.50	19,776.00	95
Walnut St.	N. line Fifth St.	N. line Ninth St.	Cedar Blk	2	1½ in. bituminous concrete, 5 in. hydraulic concrete.	1,450.00	7,602.20	2.80	21,546.16	104
Holmes St.	Twelfth St.	Fifteenth St.	Cedar Blk	2	4 in. concrete, 1½ in. bituminous concrete.	1,419.90	5,424.50	2.50	13,561.25	68
Broadway.	S. line St. car trks. Twelfth St.	S. line Fourteenth St. (West).	Cedar Blk	2	1½ in. bituminous concrete, old concrete.	1,181.70	4,908.30	2.60	12,718.94	87
Forest Ave.	Independ. Ave.	Twelfth St.	Cedar Blk	1½	1½ in. bituminous concrete, 4 in. hydraulic concrete.	2,675.00	11,027.06	2.57	28,389.54	119
Eleventh St.	E. line Grand Ave.	E. line Cherry St.	None	2	1½ in. bituminous concrete, 5 in. hydraulic concrete.	1,811.20	5,526.50	2.80	15,474.20	19
Locust St.	Eighth St.	Fifteenth St.	Cedar Blk	1½	1½ in. bituminous concrete, old concrete.	2,914.00	11,811.10	2.50	24,277.75	188
Thirteenth St.	Walnut St.	Baltimore Ave.	None	2	1½ in. binder course, 5 in. concrete.	502.80	1,717.80	2.80	4,908.44	6
Fourteenth St.	Broadway.	Virginia Ave.	Cedar Blk	1½	1½ in. binder course, 4 in. concrete.	5,782.30	20,269.80	2.57	52,092.62	192
Fifth Street.	Main St.	Walnut St.	Cedar Blk	2	1½ in. binder course, old concrete.	286.50	887.40	2.65	2,319.11	4
Garfield Ave.	Thirteenth St.	Fifteenth St.	None	2	1½ in. binder course, 4 in. hydraulic concrete.	941.40	2,600.50	2.50	6,501.25	79
						27,321.70	119,460.26		\$808,784.62	1,198

5 16-100 miles. Average cost, \$2.64 per square yard.

STREET PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.

MACADAM.

Street.	From.	To.	Former Pavement.	Specifications.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Billa.
Baltimore Ave.....	Twenty-Third St...	Twenty-Fifth St...	None	1 in. crusher screenings, 12 in. stone, stone gutters.....	1,264.30	3,233.90	40.49 1/2	\$1,600.78	83
Park Ave.....	Twelfth St.....	Eighteenth St.....	None	1/2 in. screenings, 3 in. granite, 9 in. limestone.....	2,770.60	8,399.60	1.07	8,987.57	180
Lydia Ave	Independence Ave. Eighth St.....	.....	None	1 in. screenings, 6 in. Bethany Falls limestone, 6 in. limestone.....	997.70	3,469.70	.58 1/2	2,029.77	29
Southwest B'v'd ..	Main St.	Broadway.....	None	7 in. Telford base, 8 in. Carter Co. granite, 1/2 in. screenings	1,805.00	6,668.80	1.04 1/2	6,968.90	97
1 2/3-1 1/4 miles. Average cost, 89 9-10c per square yard.					6,337.60	21,772.00		\$19,587.02	389

STREET PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.

GRANITE BLOCKS.

Street.	From.	To.	Former Pave- ment.	Specifications.	Lineal Feet.	Square Yards.	Cost per Sq Yd.	Cost.	No. of Bills.
Walnut St.	N. line Fourth St.	N. line Fifth St.	Ced. Bk	On old concrete, 2 in. sand, with stone headers	329.50	1,238.80	\$2.47	\$3,077.84	8
0 6-100 miles. Average cost, \$2.47 per square yard.									
					329.50	1,238.80	\$2.47	\$3,077.84	8

STREET PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.

CEDAR BLOCKS.

Street.	From.	To.	Former Pavement.	Foundation.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Bills.
Ninth St.	Mulberry St.	State Line. ...	Cedar Blk	Old concrete. ...	2,068.15	8,481.60	\$1.05	\$9,699.95	109
0.39-100 miles. Average cost, \$1.05 per square yard.									
					2,068.15	8,481.60		\$9,699.95	109

ALLEY PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.

VITRIFIED BRICK.

Between	From.	To.	Foundation. Spaces bet. bricks, sand.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Bills.
Seventh St and Eighth St	Central St.	Alley immediately East of May St.	6 in. concrete, 2 in. sand	142.10	251.30	\$1.34	\$336.74	9
Tenth St and Eleventh St	Garfield Ave.	Euclid Ave.	4 in. concrete, 2 in. sand	277.30	369.70	1.34	495.40	17
A part of the Alley in Block 7, Coates' Addition.			4 in. concrete, 2 in. sand	585.70	626.10	1.22½	766.97	16
Walnut St. and Grand Ave	167½ feet South of Ninth St.	Tenth St.	6 in. concrete, 2 in. sand	167.50	402.80	1.35	542.49	10
Troost Ave and Forest Ave	Tenth St.	Eleventh St.	4 in. concrete, 2 in. sand	385.00	641.50	1.38	885.27	22
Number of contracts, 5. Miles, 0.295 Average cost per square yard, \$1.274.				1,357.60	2,391.40		\$3,046.87	74

RECAPITULATION OF STREET PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1905.

Material Used.	Number of Contracts	Linear Feet.	Miles	Square Yards	Cost	Average Cost per Sq. Yd.	Number of Hills
Trinidad Asphalt.....	15	27,241.00	5.16	115,400.40	\$105,434.04	\$0.91	1.185
Macadam.....	4	8,861.70	1.29	21,714.00	19,056.02	.88	.050
Granite Blocks.....	1	329.50	.06	1,245.00	\$4,011.84	3.21	.05
Vitrified Brick.....	17	14,181.40	2.49	43,911.00	\$1,914.19	1.436	.400
Cedar Blocks, Re-pave.....	1	2,088.15	.39	8,181.00	\$9,800.54	1.05	.100
	36	49,596.65	9.39	195,540.40	\$462,024.20		2.140

STATEMENT OF STREETS PAVED TO APRIL 15, 1895.

Material Used.	Lineal Feet.	Miles.
Asphalt.....	110,441.10	20.91
Macadam.....	55,181.90	10.45
Granite Blocks or Stone Blocks.....	11,316.00	2.14
Vitrified Brick.....	67,017.30	12.69
Cedar Blocks.....	195,593.30	37.04
	439,549.60	83.23

CURBING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.

Street.	Side.	From.	To.	Thickness Inches.	Constructed by Owners.			Constructed by Public Contract.			Total Constructed.		No. of Bills.
					Lineal Feet.	Cost per Ft.	Cost.	Lineal Feet.	Cost per Ft.	Cost.	Lineal Feet.	Cost.	
Vine St.	Both.	Ninth St.	Tenth St.	5	225.00	40c.	\$ 90.00	618.00	39½c.	\$ 242.56	843.00	\$ 332.56	15
Third St.	Both.	Grand Ave.	Locust St.	5	800.00	45c.	\$60.00	520.60	40c.	204.24	1,320.60	568.24	6
Fifteenth St.	Both.	Broadway.	Pennsylvania Ave	5	5	5	5	286.90	48c.	85.46	286.90	85.46	15
Seventh St.	Both.	Garfield Ave.	Olive St.	5	1,400.00	40c.	560.00	309.90	39½c.	122.41	1,709.90	682.41	2
Flora Ave.	Both.	Eighteenth St.	Twenty-first St.	5	375.00	40c.	150.00	1,571.70	37c.	581.53	1,946.70	731.53	52
Eleventh St.	Both.	Garfield Ave.	Brooklyn Ave.	4	480.00	40c.	192.00	288.30	35c.	100.87	768.20	292.87	5
* Baltimore Ave	Both.	Twenty-Third St.	S line Waldo Pl.	5	530.00	90c.	424.00	1,125.80	72c.	810.58	1,655.80	1,234.58	41
† Eleventh St.	Both.	Tracy Ave.	Locust St.	†	165.00	40c.	66.00	1,716.00	85c.	1,458.60	1,881.00	1,607.10	12
Thirteenth St.	Both.	Garfield Ave.	Flora Ave.	5	840.00	40c.	336.00	1,077.90	39½c.	425.77	1,917.90	761.77	10
Garfield Ave.	Both.	Thirteenth St.	Fifteenth St.	5	1,220.00	45c.	549.00	763.50	41c.	313.85	1,985.50	862.85	31
Park Ave.	Both.	Fifteenth St.	Eighteenth St.	5	1,375.00	40c.	550.00	1,338.80	37½c.	499.03	2,713.80	1,049.03	44
Forest Ave.	Both.	Twenty-Seventh St.	Twenty-Ninth St. St.	5	2,450.00	40c.	980.00	168.40	88c.	63.99	2,618.40	1,043.99	2
Lydia Ave.	Both.	Independ. Ave.	Eight St.	5	1,100.00	40c.	440.00	872.90	36½c.	318.61	1,972.90	758.61	16
Park Ave.	Both.	Twelfth St.	Fifteenth St.	5	2,600.00	40c.	1,040.00	338.70	36c.	121.93	2,938.70	1,161.93	13
Seventh St.	Both.	Pennsylvania Ave	A point 400.11 feet west	4	823.20	.....	.....	823.20	.....	285.40	823.20	285.40	9
15 contracts. Miles, 4.807. Average cost, 45c.					13,560.00	.....	\$5,819.50	11,822.50	.....	\$5,638.83	25,382.50	\$11,458.33	273

*Curb and Gutter.

†Parkhurst's Combined Curb and Gutter.

FIRST CLASS SIDEWALKS CONSTRUCTED DURING FISCAL YEAR ENDING AP. 15, 1895.

ARTIFICIAL STONE AND HEXAGON BLOCK.

Street.	Side.	From.	To.	Constructed by Public Contract.			Constructed by Property Owners.			Total Constructed.			No. of Bills.
				Lineal Feet.	Square Feet.	Per Cent Cost.	Lineal Feet.	Square Feet.	Amount.	Lineal Feet.	Square Feet.	Amount.	
B'klyn Av.	Both.	Indep Ave.	9th St.	6	263.85	18%	2,300.00	13,200.00	341.88	2,300.00	14,783.10	2,981.88	6
26th St.	Both.	Truist Ave.	Forrest Ave.	6	141.67	18%	2,300.00	13,200.00	153.00	2,300.00	14,783.10	2,981.88	6
9th St.	Both.	B'klyn Av.	Prospect Ave.	6	143.92	17 1/2%	2,300.00	13,200.00	153.00	2,300.00	14,783.10	2,981.88	6
Olive St.	Both.	Indep Ave.	W' 10th St.	6	383.03	17 1/2%	2,300.00	13,200.00	372.78	2,300.00	14,783.10	2,981.88	6
3th St.	Both.	Olive St.	W' 10th St.	6	323.50	17 1/2%	2,300.00	13,200.00	372.78	2,300.00	14,783.10	2,981.88	6
Olive St.	Both.	Lea St.	St. John Av.	6	323.50	17 1/2%	2,300.00	13,200.00	372.78	2,300.00	14,783.10	2,981.88	6
Forest Ave.	Both.	15th St.	14th St.	6	166.45	17 1/2%	2,300.00	13,200.00	172.34	2,300.00	14,783.10	2,981.88	6
9th St.	Both.	W' 10th St.	B'klyn Av.	6	186.20	17 1/2%	2,300.00	13,200.00	172.34	2,300.00	14,783.10	2,981.88	6
Harrison St	Both.	14th St.	14th St.	6	570.70	18%	2,300.00	13,200.00	541.87	2,300.00	14,783.10	2,981.88	6
STONE.				2,123.82	12,862.30		15,003.16	89,722.00	\$2,305.26	17,126.98	102,584.30	\$19,610.64	70
Wy'dotte St	West.	14th St.	16th St.	6	24.40	19 1/2%	920.00	5,520.00	28.54	944.40	5,666.40	1,182.54	1
BRICK.													
Cherry St.	East.	Mo. Ave.	Indep. Ave.	5	80.00	9 1/2%	414.00	2,070.00	37.00	494.00	2,470.00	244.00	2
11 contracts 20 9/10 miles				2,224.20	13,408.60		16,837.16	97,312.00	\$2,370.80	18,565.38	110,720.60	\$20,987.20	73

PLANK SIDEWALKS CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.

Street.	Side.	From.	To.	Constructed by Public Contract.			Constructed by Private Contract.			Total Constructed.		No. of Bills.
				Lineal Feet.	Cost.	Per Cent.	Lineal Feet.	Cost.	Per Cent.	Lineal Feet.	Cost.	
Vine St.....	East	Nineteenth St.	Twenty-Third St.	178.20	77.96	45.75	1,200.00	540.00	45	1,378.20	617.96	7
Flora Ave.....	West	40 feet North of Eighteenth St.	Alley North of Eighteenth St.	5	3.55	22.5	109.20	27.80	25	125.00	30.85	1
Missouri Ave.....	South	Tracy Ave.	Lydia Ave.	15.80	87.21	22.5	100.00	25.00	25	449.00	87.21	6
Washington St.....	West	Twenty-Fifth St.	450 feet South.	360.00	85.50	23.75	100.00	25.00	25	460.00	110.50	15
Washington St.....	East	Sixth St.	Seventh St.	246.20	58.47	23.75	100.00	25.00	25	316.20	83.47	7
Walton St.....	West	Twelfth St.	Thirteenth St.	376.70	92.29	24.5	100.00	25.00	25	426.70	104.79	6
College Ave.....	East	Twentieth St.	Twenty-First St.	408.40	100.05	24.5	100.00	25.00	25	508.40	121.05	10
Locust St.....	West	Twenty-Sixth St.	Twenty-Seventh St.	273.80	87.00	24.5	110.00	27.50	25	383.80	94.50	14
Fourth St.....	North	Woodland Ave.	Euclid Ave.	368.80	90.35	24.5	170.00	42.50	25	538.80	132.85	3
Thompson Ave.....	North	Walton Ave.	East-in City Lim.	776.80	174.66	22.5	1,100.00	275.00	25	1,876.80	449.66	23
Twenty-Sixth St.....	North	Michigan Ave.	Euclid Ave.	266.20	74.62	28	260.00	65.00	25	526.20	139.62	2
Twenty-Fourth St.....	North	Oliver St.	Prospect Ave.	257.70	63.78	24.75	260.00	51.70	25	517.70	125.48	2
Park Ave.....	North	Tracy Ave.	Nineteenth St.	482.90	123.13	25.5	160.00	41.60	26	642.90	164.73	5
Pacific St.....	North	Tracy Ave.	Lydia Ave.	418.70	124.56	25.5	100.00	25.00	25	518.70	149.56	7
Bellefontaine Ave.....	East	Thompson Ave.	110 feet South.	121.50	32.40	26.5	100.00	25.00	25	221.50	57.40	2
Fairmount Ave.....	East	Benton Place.	Twenty-Fourth St.	223.50	55.45	24.9	100.00	25.00	25	323.50	80.45	7
Ord St.....	East	Elma St.	Amie St.	241.90	43.54	18	100.00	25.00	25	341.90	68.54	6
West Prospect Pl.....	East	Twenty-Eighth St.	Twenty-Ninth St.	665.50	156.39	23.5	300.00	75.00	25	965.50	231.39	26
Wabash Ave.....	West	Thirteenth St.	Fourth St.	135.80	34.26	21.99	200.00	50.00	25	335.80	84.26	6
Chesnut Ave.....	East	Twenty-Fifth St.	Twenty-Fourth St.	274.10	60.27	21.99	212.00	53.00	25	486.10	113.27	10
College Ave.....	East	Center of blk.	Twenty-Third St.	5	114.87	21.99	100.00	25.00	25	119.87	29.87	20
Twentieth St.....	South	Indiana Ave.	Mason Ave.	367.50	59.58	21.9	100.00	25.00	25	467.50	84.58	2
Walnut St.....	East	Second St.	Third St.	183.00	25.90	21.95	185.00	46.25	25	368.00	72.15	3
Mason Ave.....	West	Twentieth St.	Twenty-First St.	493.10	94.57	21.5	100.00	25.00	25	593.10	99.57	19
Agnes Ave.....	South	Twentieth St.	Twenty-Fourth St.	499.70	105.28	21.5	100.00	25.00	25	599.70	130.28	15
Sixteenth St.....	South	Lydia Ave.	Alley East of Lydia Ave.	185.70	29.84	21.99	100.00	25.00	25	285.70	54.84	1
Fourth St.....	South	Allegheny, East	Prospect Ave.	310.90	68.86	21.99	140.00	35.00	25	450.90	103.86	3
Gennessee St.....	West	In fr. lots 889, 890 and 891	Madison Pl.	100.00	21.50	21.5	100.00	25.00	25	200.00	51.50	3
Missouri Ave.....	North	Campbell St.	Harrison St.	292.00	64.21	21.99	100.00	25.00	25	392.00	89.21	3
29 contracts. 2.56 miles. Average cost per lineal foot, \$0.261.				9,129.80	\$2,188.80		4,395.20	\$1,339.65		13,525.00	\$3,528.45	231

DISTRICT SEWERS CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.
CONTINUED.

District Number.	Ordinance Number.	Galvanized Iron Pipe. 14-inch.		Pipe for Drainage. 12-inch.		Pipe for Drainage. 15-inch.		Rip-Rap.		Total Lineal Feet.	Total Cost.	No. of Tax Bills.
		Lineal Feet.	Price.	Lineal Feet.	Price.	Lineal Feet.	Price.	Cubic Yards.	Price.			
Joint	3,479									966.40	\$ 913.88	160
94	5,189	2,026.00	40c	161.00	60c	291.00	88c	15.60	\$1.50	34,623.30	79,233.94	1,247
95	5,188									538.30	429.30	16
176	6,000									785.10	1,237.09	64
4 contracts. 6.97 miles.										36,813.70	\$81,834.41	1,487

REPAIRS FIRST-CLASS SIDEWALKS AND CURBING
DURING FISCAL YEAR ENDING APRIL 15TH, 1895.

District.	New Curb. Lineal Feet.	Reset Curb. Lineal Feet.	Redress Curb. Lineal Feet.	Repairs Sidewalks. Square Feet.	Stop Boxes. Number.	Total Amount.	No. of Bills.
General.....	695.56	2530.45	.....	604.20	7	\$898.29	117

REPAIRS SECOND-CLASS SIDEWALKS
DURING FISCAL YEAR ENDING APRIL 15, 1895.

District.	New Lumber. Feet B. M.	Old Lumber. Feet B. M.	Grading. Cubic Yards.	Total Cost.	No. of Bills.
District No. 1.....	79,097.89	84,433.07	55.00	61,834.51	681
District No. 2.....	116,017.87	126,815.49	129.00	2,997.20	662
District No. 3.....	66,849.31	10,425.06	182.00	1,911.37	648
	261,954.07	225,673.62	366.00	66,743.08	1,991

PUBLIC SEWER CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.

PUBLIC INTERCEPTING SEWER, FROM EASTERN CITY LIMITS TO BIG BLUE RIVER, ORDINANCE NO. 5874, APPROVED JUNE 14, 1894; COTTER, McDONALD & CO., CONTRACTORS.

12-inch Pipe Sewer.		18-inch Pipe Sewer.		18-inch Iron Pipe Sewer.		Lamp Holes.		Man Holes.		Stone Masonry.		Total Length Sewer.	Total Amount.
Lineal Feet.	Cost per ft.	Lineal Feet.	Cost per ft.	Lineal Feet.	Cost per ft.	No.	Price.	No.	Price.	Cubic Yds.	Price.		
6,271.70	33c.	7,791.40	33c.	72.00	33c.	6	\$33.00	18	\$14.88	20.50	\$2.75	14,125.1	\$4,999.90

PUBLIC WORK CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 15, 1895.
AUTHORIZED BY ORDINANCE.

Ordinance.		Specifications.	Contractor.	Appropriation.	Amount.
Number.	Date Approved.				
5,963	Sept. 7, 1894	Constructing granitoid sidewalks and curb on S. side of Public sq.	K. C. Stone Sidewalk Co.	\$ 500.00	\$ 422.55
5,969	Aug. 28, 1894	Paving a part of the Public square.	Barber Asphalt Paving Co.	1,040.00	1,018.39
6,065	Nov. 9, 1894	Constructing sidewalk and stairway along southerly line of Morse's second addition.	H. S. Trestail.	210.00	172.51
				\$1,750.00	\$1,613.45

**MISCELLANEOUS PUBLIC WORK CONSTRUCTED DURING FISCAL YEAR ENDING
APRIL 15, 1895. PAID FOR BY VOUCHER.**

Contractor.	Specifications.	Amount.
F. P. McCormick	Repairing street pavement of Fourth St. between Main St. and Delaware St.	5.15
Barber Asphalt Paving Co.	Paving intersection of Fourth St. and Market House	108.65
James O'Donnell	Paving east 12 feet of Market Sq.	961.57
Barber Asphalt Paving Co.	For 2.9 sq. vds. paving at intersection of Thirteenth St. and Walnut St.	6.95
W. S. Dickey	For constructing lateral sewer on Reservoir Ave. from manhole on Mercier Ave. to a point 100 feet west	30.00
L. D. H. Russell	For repairs and lowering sewer at intersection of Eleventh St. and McGee St.	439.89
C. M. Cravens	For constructing curbing on Seventh St. at southwest corner of Seventh St. and Brooklyn Ave.	14.70
Barber Asphalt Paving Co.	For constructing curbing on south side Seventh St. from Pennsylvania Ave. west, 122 feet.	4.56
Kansas City Stone Sidewalk Co.	For repairs of street pavement at Ninth and Walnut Sts.	22.50
Barber Asphalt Paving Co.	For cover to fire cistern at southwest corner of Market Sq.	210.00
Barber Asphalt Paving Co.	For paving alley, intersection Fifth St. and Market Sq.	133.03
Barber Asphalt Paving Co.	For repairing cuts in pavement at Independence Ave. and Olive St., also at Independence Ave. and Prospect	83.25
		\$1,970.25

STREET SPRINKLING DURING FISCAL YEAR ENDING APRIL 15, 1895.

Street.	From	To	Date Sprinkled.		Time.	Lineal Feet of Street.	Cost per Month per Lineal Foot.	Lineal Feet of Property.	Times per Day.	Reduction to Bring Cost Within Limit.	No. of Bills.	Total Cost.
			From.	To	Months.	Days.						
Broadway	Eleventh St	Sixteenth St	Mar. 1, 1894	Oct. 31, 1894	8	2	2,244,000	6	3,975.23	8	312	\$ 859.04
Central St	Fifth St	Tenth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,764,000	2	3,975.40	8	158	207.12
Charlotte St	Fifth St	Independ. Ave	Mar. 1, 1894	Oct. 31, 1894	8	2	2,894,000	2	1,823.46	8	188	192.41
Eleventh St	Mill St	Hickory St	Mar. 1, 1894	Oct. 31, 1894	8	2	2,892,000	2	4,370.76	8	91	396.48
Eleventh St	Mill St	Hickory St	Mar. 1, 1894	Oct. 31, 1894	8	2	2,892,000	2	4,370.76	8	216	425.90
Eleventh St	Mill St	Hickory St	Mar. 1, 1894	Oct. 31, 1894	8	2	2,892,000	2	4,370.76	8	100	433.96
Grand Ave	Fourth St	Twelfth St	Mar. 1, 1894	Oct. 31, 1894	8	2	3,951,000	1	10,739.64	8	602	1,667.12
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	218	254.94
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	138	261.84
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	65	831.84
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	8	15.01
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	443	635.74
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	361	703.40
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	192	439.10
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	58	293.52
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	40	115.28
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	214	290.78
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	48	73.72
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	441	638.16
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	141	414.44
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	61	222.82
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	62	160.92
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	314	676.54
Hobbes St	Third St	Fourth St	Mar. 1, 1894	Oct. 31, 1894	8	2	1,200,000	2	3,438.64	8	94	187.60
Amount forward							58,100.30	101,510.05			4,538	\$9,547.58

STREET SPRINKLING DURING FISCAL YEAR ENDING APRIL 15, 1895, CONTINUED.

Street.	From	To	Date Sprinkled.		Time.		Lineal Feet of Street.	Cost per Month per Lineal Foot.	Lineal Feet of Property.	Times per Day.	Reduction to Bring Cost Within Limit.	No. of Tax Bills.	Total Cost.
			From	To	Months	Days							
Amount brought forward							58,100.50		101,510.05			4,538	\$ 9,547.58
Twelfth St.	Liberty St.	Mulberry St.	Mar. 1, 1894	Oct. 31, 1894	8	.....	618.00 13	.....	1,172.00	3	.....	102	90.72
Twelfth St.	Liberty St.	Bell St.	Mar. 1, 1894	Oct. 31, 1894	8	.....	1,081.00 13-12	.....	2,102.50	3	.....	84	122.50
Union Ave.	Bluff St. Bridge	Hickory St.	Mar. 1, 1894	Oct. 31, 1894	8	.....	2,367.00 2 1-5	.....	4,220.00	3	.....	246	416.60
Wyandotte St.	Ninth St.	Twelfth St.	Apr. 16, 1894	Oct. 31, 1894	6	15	1,224.00 2 1-10	.....	2,216.00	3	.....	150	167.08
Wyoming St.	Seventeenth St.	Liberty St.	Mar. 1, 1894	Oct. 31, 1894	8	.....	1,808.00 212	.....	3,530.20	3	85.58	114	353.02
Walnut St.	Third St.	Ninth St.	Mar. 1, 1894	Oct. 31, 1894	8	.....	2,357.00 1 1/2	.....	4,059.80	3	.....	245	853.52
Bluff St.	Fifth St.	St. Louis Ave.	June 14, 1894	Nov. 30, 1894	5	17	1,087.00 3	.....	1,990.00	4	.....	29	181.53
Broadway	Third St.	Eleventh St.	Apr. 16, 1894	Nov. 30, 1894	7	15	2,770.00 2 83 100	.....	4,718.20	4	.....	296	597.94
Campbell St.	Ninth St.	Sixteenth St.	Apr. 16, 1894	Nov. 30, 1894	7	15	3,207.00 3 1	.....	5,600.21	4	.....	418	661.41
Cherry St.	Fourteenth St.	Nineteenth St.	June 2, 1894	Nov. 30, 1894	5	25	2,350.00 3	.....	4,411.13	4	.....	290	420.65
Eleventh St.	Santa Fe St.	Liberty St.	June 5, 1894	Nov. 30, 1894	5	26	1,019.00 2 2-3	.....	1,970.00	4	.....	156	159.42
Fourteenth St.	Virginia Ave.	Woodland Ave.	Apr. 16, 1894	Nov. 30, 1894	7	15	1,711.00 2 3-5	.....	2,710.74	4	.....	68	111.21
Forest Ave.	Independ Ave.	Fifth St.	Apr. 17, 1894	Nov. 30, 1894	6	14	1,375.50 2 1	.....	2,198.63	4	.....	90	282.46
Fifteenth St.	Virginia Ave.	Prospect Ave.	June 7, 1894	Nov. 30, 1894	5	24	4,316.03 3 19 20	.....	7,174.66	4	.....	324	984.79
Harrison St.	Sixteenth St.	Eighteenth St.	Apr. 16, 1894	Nov. 30, 1894	7	15	931.00 2 1/2	.....	1,783.91	1	.....	178	192.01
Liberty St.	Twelfth St.	300 feet South of Seventeenth St.	Apr. 17, 1894	Nov. 30, 1894	7	14	2,925.00 2 1/2	.....	4,505.50	4	.....	174	600.60
Ninth St.	Prospect Ave.	East'n City Lim's	Apr. 16, 1894	Nov. 30, 1894	7	15	3,870.00 2 9-10	.....	7,449.40	4	.....	202	841.73
Santa Fe St.	Eight St.	Twelfth St.	Apr. 11, 1894	Nov. 30, 1894	7	15	1,518.00 3	.....	2,479.63	4	.....	115	344.58
Sixteenth St.	Liberty St.	Bell St.	June 2, 1894	Nov. 30, 1894	5	29	886.00 2 2-3	.....	1,508.00	4	.....	26	140.96
Virginia Ave.	Fourteenth St.	Fifteenth St.	Apr. 16, 1894	Nov. 30, 1894	7	15	444.50 2 3-5	.....	876.53	4	.....	58	86.68
Vine St.	Eighteenth St.	Twenty-Third St.	June 14, 1894	Nov. 30, 1894	5	17	2,318.00 3	.....	4,048.00	4	.....	251	387.10
Wyoming St.	Twelfth St.	Seventeenth St.	May 7, 1894	Nov. 30, 1894	6	25	2,407.00 2 1/2	.....	4,570.00	1	.....	250	450.53
Wyoming St.	Ninth St.	St. Louis Ave.	Apr. 14, 1894	Nov. 30, 1894	7	17	573.00 2 1/2	.....	1,083.00	4	.....	56	119.23
Total.....										101,253.50		8,331	\$17,818.30
47 Contracts.										177,219.51			

STREET CLEANING AND SPRINKLING DURING FISCAL YEAR ENDING APRIL 15, 1895.

Street.	From.	To.	Dates.		Sprinkling.			Cleaning.			Lineal Feet of Street.	Reduced to bring it prescribed by Ordinance.	No. of Tax Bills.	Amount of Bills.	
			From.	To.	Mo's	Days	Time.	Times per Day.	Cost per Lin. Ft. per Month.	Per Week.					Total Times.	Cost per Cleaning.
Baltimore Ave.	Ninth St.	Twelfth St.	Mar. 1 '94	Oct. 31 '94	8	...	Cts.	3	105	4.50	2,201.00	1,224.00	138	550.25	
Delaware St.	Fourth St.	Ninth St.	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	6	209	3.94	3,430.52	1,913.00	244	857.63	
Eleventh St.	Grand Ave.	Main St.	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	3	108	1.52	920.50	517.00	20	193.93	
Fifth St.	Grand Ave.	Broadway	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	3	105	5.00	3,584.56	2,134.00	161	673.78	
Fourth St.	Delaware St.	Broadway	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	3	103	2.11	1,963.00	1,091.00	104	374.13	
Fifteenth St.	Campbell St.	Virginia Ave.	Mar. 1 '94	Oct. 31 '94	8	...	2 1/4	3	102	5.00	2,676.00	1,627.00	230	669.00	
Grand Ave.	First St.	Third St.	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	3	113	3.00	1,363.04	767.00	38	340.76	
McGee St.	Twelfth St.	Nineteenth St.	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	6	210	1.74	1,512.00	853.50	94	383.80	
Main St.	Third St.	Missouri Ave.	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	6	207	5.15	2,687.48	2,660.00	402	1,711.87	
Ninth St.	Missouri Ave.	Twelfth St.	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	3	105	2.20	1,936.95	1,116.00	104	357.41	
Sixth St.	Main St.	Broadway	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	3	106	3.15	2,182.00	1,318.00	138	584.02	
Tenth St.	Delaware St.	Broadway	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	3	103	10.56	5,800.25	3,214.00	406	2,370.50	
Twelfth St.	Grand Ave.	Wyandotte St.	Mar. 1 '94	Oct. 31 '94	8	...	2	3	104	6.43	4,011.50	2,342.00	283	1,430.06	
Walnut St.	Truon Ave.	Pennsylv. Ave.	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	3	104	2.00	1,172.75	637.00	44	193.93	
Wyandotte St.	Second St.	Ninth St.	Mar. 1 '94	Oct. 31 '94	8	...	1 1/2	3	104	2.00	1,172.75	500.00	54	189.77	
Wall St.	Second St.	Ninth St.	June 2 '94	Nov. 30 '94	5	...	2 1/2	2	52	2.60	1,193.00	617.00	36	159.32	
Delaware St.	Second St.	Fourth St.	July 1 '94	Nov. 30 '94	4	...	2 1/2	2	52	7.70	2,577.00	2,577.00	174	842.46	
Grand Ave.	Independ. Ave.	Seventh St.	June 2 '94	Nov. 30 '94	5	...	2 1/2	2	52	7.70	2,577.00	2,577.00	174	842.46	
Walnut St.	Sixteenth St.	K. C. Belt Ry.	June 2 '94	Nov. 30 '94	5	...	2 1/2	2	52	7.70	2,577.00	2,577.00	174	842.46	
													3,380	\$14,988.67.	
														61,536.46	37,293.50

RECAPITULATION OF STREET CLEANING AND SPRINKLING DURING FISCAL YEAR ENDING APRIL 15, 1895.

Specifications	Number of Contracts.	Lineal Feet of Property.	Lineal Feet of Street.	Miles.	Average Cost Average Cost per Lin. Ft. per Lin. Ft. Property. Street.	Number of Tax Bills.	Amount.
Sprinkling	47	177,219 54	101,253 50	19.18	\$0.1065	8,331	\$17,818.30
Cleaning	19	93,655.47	51,565.00	10.34	.1271	4,656	11,908.03
Cleaning and Sprinkling.	21	64,536 46	37,262 50	7.06	.2322	3,390	14,988.67
	97	345,411 47	193,101.00	36.58		16,367	\$44,715 00

**STREET PAVING UNDER CONTRACT AT CLOSE OF FISCAL YEAR ENDING
APRIL 15, 1895.
ASPHALT.**

Street.	From.	To.	Former Pave- ment.	Thick- ness, Inches.	Foundation.	Approximate Estimate.		
						Lineal Feet.	Square Yards.	Total Cost.
Lexington Ave.	Garfield Ave.	Wabash Ave.	None.	2	4 in. Hydr. Cement Concrete.	1,206.41	3,427.00	\$8,567.50
						1,206.41	3,427.00	\$8,567.50

**STREET PAVING UNDER CONTRACT AT CLOSE OF FISCAL YEAR ENDING
APRIL, 15, 1895—CONTINUED.**

BRICK.

Street.	From.	To.	Former Pave- ment.	Spaces between Brick.	Foundation.	Approximate Estimate.		
						Lineal Feet.	Square Yards.	Cost per Square Yard. Total Cost.
Ninth St.	Washington St.	Pennsylvania Ave	None.	Sand.	6 in. concrete, 2 in. sand.	256.00	667.20	\$ 917.42
Ninth St.	Pennsylvania Ave	Jefferson St.	None.	Sand.	6 in. concrete, 2 in. sand.	256.00	674.00	962.76
Seventh St.	Broadway	Pennsylvania Ave.	None.	Sand.	6 in. concrete, 2 in. sand.	712.20	2,796.50	3,497.15
						1,224.20	4,141.70	5,797.33

STREET PAVING UNDER CONTRACT AT CLOSE OF FISCAL YEAR ENDING
APRIL 15, 1895—CONTINUED.

MACADAM.

Street.	From.	To.	Former Pavement.	Specifications.	Approximate Estimate.			
					Lineal Feet.	Square Yards.	Cost per Square Yard.	Total Cost.
Independence Ave.	Woodland Ave. ...	Walrond Ave.	Ced. Blk.	3½ in. crushed granite, bonded with gravel, 10 in. limestone	4,434.00	20,328.00	\$1.24	\$25,228.84
					4,434.00	20,328.00		\$25,228.84

**PLANK SIDEWALKS UNDER CONTRACT AT CLOSE OF FISCAL YEAR ENDING
APRIL 15, 1895.**

Street.	Side.	From.	To.	Width, Feet.	Approximate Estimate.		
					Lineal Feet.	Price, Cts.	Cost.
Askeu Woodward Ave.	East.	Scarritt Ave.	St. John Ave.	5	600.00	33.	\$198.00
Amie St.	South.	Ord St.	Brooklyn Ave.	5	120.30	21.	27.36
Grove St.	West.	Nineteenth St.	225 feet South of Nineteenth St.	5	30.00	22.	11.00
Rivier Place.	West.	Merrill Place.	Twenty-Eighth St.	5	293.60	22.99	68.47
Missouri Ave.	North.	Campbell St.	Harrison St.	5	300.00	21.99	65.97
Lark Ave.	East.	Twenty-Second St.	124 feet North of Twenty-Second St.	5	203.30	21.25	41.91
Trout Ave.	West.	Twenty-Eighth St.	Twenty-Ninth St.	5	642.50	21.75	132.50
Wyandotte St.	West.	Twenty-Ninth St.	230 feet South of Twenty-Ninth St.	5	250.00	29.	72.50
					2,509.30		\$641.11

**FIRST-CLASS SIDEWALKS UNDER CONTRACT AT CLOSE OF FISCAL YEAR
ENDING APRIL 15, 1895.**

Street.	Side.	From	To	Width.	Approximate Estimate.				Material.
					Lineal Feet.	Square Feet.	Price per Foot.	Cost.	
Eighth St	Both.	Pennsylvania Ave	Jefferson St.	6	250.00	1,500.00	20c.	\$ 300.00	Hexagon Block.
Prospect Ave.	West.	Independence Ave.	Ninth St.	6	1,277.30	7,663.80	17c.	1,364.04	Hexagon Block.
Washington St.	West.	Ninth St.	Tenth St.	6	116.66	700.00	17c.	119.00	Hexagon Block.
					1,643.96	9,863.00		\$1,783.04	

**ALLEY GRADING UNDER CONTRACT AT CLOSE OF FISCAL YEAR ENDING
APRIL 15, 1895.**

Between	From	To	Lineal Feet.	Approximate Estimate.						Amount.
				Cubic Yards Earth.			Rock.			
				Excava- tion.	Price.	Embank- ment.	Price.	Cubic Yards.	Price.	
Pennsylvania Ave. and Washing- ton St.....	Alley South of Six- teenth St.....	Seventeenth St....	698.60	.....	.....	284.30	5c.	153.90	60c.	\$106.56
Jefferson St. and Summit St.....	Alley South of Six- teenth St.....	Seventeenth St....	698.60	217.20	32c.	.....	.....	.....	.....	69.50
Immediately So. of Sixteenth St...	Jefferson St.....	Summit St.....	269.50	198.80	35c.	.....	.....	.....	.....	67.83
Troost Ave. and Forest Ave.	Twenty-Sixth St...	Twenty-Sev'nth St.	578.00	315.60	24c.	.....	.....	.....	.....	75.74
			2,244.70	726.60		284.30		153.90		\$319.63

DISTRICT SEWERS UNDER CONTRACT AT CLOSE OF FISCAL YEAR ENDING
APRIL 15, 1895.

Approximate Estimate.

District Number.	Ordinance Number.	Catch Basin Connections. 12-inch Pipe.	Pipe Sewer.						Manholes.		Rock Excavation		Lineal Feet.	Amount.
			8-inch.		10-inch.				Number.	Price, each.	Cubic Yards.	Price per Cubic Yard.		
			Lineal Feet.	Price per Ft.	Lineal Average Depth. Feet.	Lineal Feet.	Price per Ft.	Average Depth. Feet.						
43.....	6,177	.....	1,324	12c	15 ft.	300	75c	5 ft.	6	\$20.00	600	\$2.50	1,428.00	\$547.36

STREET CLEANING CONTRACTS IN FORCE AT CLOSE OF QUARTER ENDING
APRIL 15, 1895.

Street.	From.	To.	Approximate Estimate.									
			Dates.		Time.		Times per Week.	Total Times.	Cost per Clean- ing.	Lineal Feet of Property.	Lineal Feet of Street.	Amount.
			From.	To.	Mos.	Days.						
Ninth St.....	Locust St.....	Forest Ave.....	Mar. 1, 1895.	Nov. 30, 1895.	9	.....	1	39	\$ 5.90	4,015.00	2,552.00	\$ 230.10
Pennsylvania Ave.....	Eighth St.....	Sixteenth St.....	Mar. 1, 1895.	Nov. 30, 1895.	9	.....	1	39	6.60	5,897.16	3,349.00	237.40
Eighteenth St.....	Main St.....	Woodland Ave.....	Mar. 1, 1895.	Nov. 30, 1895.	9	.....	3	117	14.20	10,830.20	6,313.00	1,661.40
Independence Ave.....	Walnut St.....	Woodland Ave.....	Mar. 1, 1895.	Nov. 30, 1895.	9	.....	2	78	15.95	10,134.16	5,965.00	1,244.10
Ninth St.....	Woodland Ave.....	Prospect Ave.....	Mar. 1, 1895.	Nov. 30, 1895.	9	.....	1	39	5.30	4,569.29	2,566.00	206.70
Woodland Ave.....	Independence Ave.....	Ninth St.....	Mar. 1, 1895.	Nov. 30, 1895.	9	.....	1	39	3.20	2,319.63	1,277.00	124.80
										37,265.44	22,002.00	\$5,724.50

**STREET SPRINKLING CONTRACTS IN FORCE AT CLOSE OF FISCAL YEAR
ENDING APRIL 15, 1895.**

Street.	From.	To.	Approximate Estimate.						
			Dates.	Time. Mos.	Per Day	Lineal Feet of Property	Lineal Feet of Street.	Cost per Month per Lin. Ft. St.	Amount.
			From.						
Bluff St.	Fifth St.	St. Louis Ave.	Mar. 1, 1895	9	4	1,990.90	1,087.00	3c	\$ 291.06
Broadway	Third St.	Eleventh St.	Nov. 30, 1895	9	4	4,748.30	2,770.00	2 1/2-100c	705.52
Campbell St.	Ninth St.	Sixteenth St.	Mar. 1, 1895	9	4	5,600.21	3,207.00	2 1/2c	795.71
Cherry St.	Fourteenth St.	Nineteenth St.	Nov. 30, 1895	9	4	4,411.48	2,350.00	3c	634.50
Eleventh St.	Santa Fe St.	Liberty St.	Mar. 1, 1895	9	4	1,970.00	1,019.00	2 1/2c	244.49
Fourteenth St.	Virginia Ave.	Woodland Ave.	Nov. 30, 1895	9	4	2,740.78	1,711.00	2 1/2-5c	400.37
Forest Ave.	Independence Ave.	Fifth St.	Mar. 1, 1895	9	4	2,498.63	1,375.50	2 1/2c	340.43
Fifteenth St.	Virginia Ave.	Prospect Ave.	Nov. 30, 1895	9	4	7,174.66	4,316.00	3 1/2-20c	1,534.32
Harrison St.	Sixteenth St.	Eighteenth St.	Mar. 1, 1895	9	4	1,763.91	981.00	2 1/2c	280.40
Liberty St.	Twelfth St.	300 ft. S. of 17th St.	Nov. 30, 1895	9	4	4,505.50	2,925.00	2 1/2c	725.93
Ninth St.	Prospect Ave.	Eastern City Limits	Mar. 1, 1895	9	4	7,449.40	3,970.00	2 1/2-10c	1,010.07
Santa Fe St.	Eight St.	Twelfth St.	Nov. 30, 1895	9	4	2,479.63	1,518.00	3c	409.96
Sixteenth St.	Liberty St.	Bell St.	Mar. 1, 1895	9	4	1,508.00	886.00	2 1/2c	213.10
Virginia Ave.	Fourteenth St.	Fifteenth St.	Nov. 30, 1895	9	4	876.53	444.50	2 1/2-5c	104.01
Vine St.	Eighteenth St.	Twenty-Third St.	Mar. 1, 1895	9	4	4,048.00	2,318.00	3c	625.66
Wyoming St.	Twelfth St.	Seventeenth St.	Nov. 30, 1895	9	4	4,570.00	2,407.00	2 1/2c	595.72
Wyoming St.	Ninth St.	St. Louis Ave.	Nov. 30, 1895	9	4	1,083.20	573.00	2 1/2c	141.81
						59,418.96	33,708.00		\$8,998.16

**STREET CLEANING AND SPRINKLING CONTRACTS IN FORCE AT CLOSE OF
FISCAL YEAR ENDING APRIL 15, 1895.**

Street.	From.	To.	Approximate Estimate.									
			Dates.		Sprinkling.			Cleaning.			Lineal Feet of Street.	Amount.
			From.	To.	Time, Months.	Times per Day.	Cost per Lin. Ft. Street per Mo.	Times per Week.	Total Times.	Cost per Cleaning.		
Delaware St.	Second St	Fourth St	Mar. 1, 1895	Nov. 30, 1895	9	4	2½c	2	78	\$2.00	960.00	\$ 285.83
Grand Ave.	Independence Ave.	Seventh St.	Mar. 1, 1895	Nov. 30, 1895	9	4	2½c	2	78	2.00	1,193.00	316.00
Walnut St.	Sixteenth St.	K. C. Belt Ry	Mar. 1, 1895	Nov. 30, 1895	9	4	2½c	2	78	7.70	4,668.70	1,268.82
											6,721.70	\$1,859.65

CONDEMNATION CASES COMPLETED DURING FISCAL YEAR ENDING APRIL 15, 1895.

Ordinance.	No.	Date Approved.	Street.	From	To	Verdict Rendered.	Benefits.		Remarks.
							Kansas City.	Property Owners.	
4,873	Feb	16, '93	Fourteenth St.	Oak St.	Locust St.	July 15, '93	\$ 5.00	\$ 16,320.00	
4,972	Apr.	7, '93	Independence Ave. Blvd.	E. line of C. P. Quest's Add.	Euclid Ave.	Apr. 6, '94	1.00	141,739.26	
4,864	Feb.	10, '93	Alley N. of Eighteenth St.	Flora Ave.	Vine St.	Sept. 8, '93	4.60	660.00	
4,862	Jan.	26, '93	Thirteenth St.	South Winfield Place	Agnes Ave.	June 22, '93	1.00	5,400.00	
5,134	May	3, '93	Eleventh St.	Independence Ave.	Ninth St.	Oct. 25, '93	1.00	3,999.00	Repealed.
4,574	Sept.	31, '92	Indiana Ave.	Twenty-Fifth St.	Twenty-Sixth St.	Apr. 10, '93	86.71	18,432.79	
5,540	Jan.	27, '91	Alley bet. Chestnut Ave	S. line of Alexander Place.	Eighteenth St.	July 2, '94	1.00	739.00	Repealed.
5,553	Jan	17, '91	College Ave.	Fifteenth St.	North line of Olive Place.	Sept. 10, '94	1.00	1,999.00	Repealed.
6,390	Feb.	24, '93	Olive St.	E. line of Downing's Res.	W. line of Prospect Ave.	June 15, '94	1.00	2,174.00	Repealed.
5,527	Dec	26, '93	Amie St.	Grand Ave.	Broadway	Apr. 20, '95			Damages Ex- ceed Benefits.
4,635	Oct.	20, '93	Twenty-Fifth St.						

CONDEMNATION CASES PENDING AT END OF FISCAL YEAR ENDING
APRIL 15, 1895.

Ordinance. No.	Date Approved.	Street.	From	To	Verdict Rendered.	Benefits.		Status of Case.
						Kansas City.	Property Owners.	
5,265	June 3, '93	Twenty-Fifth St.	Holly St.	Southwest Boulevard.	Nov. 27, '93	\$1.00	\$ 7,043.00	Collecting.
5,640	Oct. 12, '91	Main St.	Twenty-Fourth St.	West line Grand Ave.	Dec. 9, '92	1.00	16,855.00	Collecting.
5,951	Aug. 28, '94	Eleventh St.	South Winfield Place	Agnes Ave.	Dec. 28, '94	1.00	4,862.10	Pending.
5,989	Sept. 13, '94	Alley bet. 13th and 14th St.	Olive St.	Wabash Ave.	Feb. 9, '95	1.00	959.00	Collecting.
6,076	Nov. 14, '91	Minnie St.	E. line Matthews and Hill's Addition.	Olive St.	Apr. 12, '95	1.00	1,749.00	Pending.
6,077	Nov. 14, '91	Bales Ave.	S. line of Carlton Place.	Fifteenth St.				Hear evidence, July 2, 1895.
6,214	Mar. 6, '95	Alley N. of Fifteenth St.	Bellefontaine Ave.	Askew Ave				Pending.
6,215	Mar. 6, '95	Walrond Ave.	S. line of Bernard Place.	Fifteenth St.				Pending.
6,229	Mar. 16, '95	Montroe Ave.	St. John's Ave.	Smart Ave.				Pending.
6,262	Apr. 13, '95	Saventeenth St.	Liberty St.	Holly St.				Pending.
6,294	Apr. 15, '95	Alley bet. St. Louis Ave. and Union Ave.	Turner & Co.'s Addition.	W. line of Block 6 of Coates & Hopkins' 2d				Pending.

GRADING CASES PENDING AT CLOSE OF FISCAL YEAR ENDING APRIL, 15, 1895.

Ordinance No.	Date Approved.	Street.	From	To	Verdict Rendered.	Benefits.		Remarks.
						Kansas City.	Property Owners.	
5470 Nov. 6, 1893		Ord St.	Elma St.	Lexington Ave.	Oct. 27, 1894			Pending.
6147 Jan. 16, 1895		Twenty-fifth St.	Woodland Ave.	Prospect Ave.				Pending.
6197 Feb. 28, 1895		College Ave.	Fourteenth St.	Fifteenth St.				Pending.
6208 Mar. 6, 1895		Alley between Tracy Ave. and Merrier St.	Twenty-ninth St.	Thirtieth St.				Pending.
5983 Sept. 12, 1894		Alley between Prospect Pl. and Bellevue Ave.	Twenty-ninth St.	Thirtieth St.				Not filed.
6084 Nov. 21, 1894		Alley between Elovim St. and Perry Jefferson St.	Walton Ave.	Indiana Ave.				Pending.
6405 Nov. 21, 1894		Alley between Jefferson St. and Pennsylvania Ave.	Twenty-sixth St.	Twenty-seventh St.				Pending.
5328 May 26, 1895		Villa St.	Pennsylvania Ave.	Jefferson St.	Apr. 16, 1894	\$50.00	\$1,550.00	New trial ordered.
5471 Nov. 26, 1893		Alley between Park Ave. and Olive St.	Pendleton Ave.	St. John Ave.	Feb. 2, 1895	1.00	512.25	Collecting.
5219 May 31, 1893		Alley between Grand Ave. and McGee St.	Thirteenth St.	Fourteenth St.				Not filed.
5571 June 15, 1894		Alley between Holly St. and West Prospect Pl.	Twenty-ninth St.	Thirtieth St.				Ord. to repeal not filed.
5473 Nov. 6, 1894		Twenty-ninth St.	Grand Ave.	Holmes St.				Not filed.
5571 Jan. 27, 1894		Montgall Ave.	Fifteenth St.	Eighteenth St.				Not filed.
5530 Apr. 12, 1894		Brooklyn Ave.	Anie St.	Lexington Ave.	Dec. 8, 1894	1.00	199.00	Collecting.
6112 Dec. 12, 1894		Alley between Cherry St. and Holmes St.	Twelfth St.	Thirteenth St.				Ordinance to Repeal introduced.
6145 Jan. 16, 1895		Merrier Pl.	Northerly line of Lot 26, Blk. 2, Res. of Whipple's 3d Add. prod.	Cliff St.				Not filed; grade to be changed.
6146 Jan. 16, 1895		Eighteenth St.	Northerly line of Lot 26, Blk. 2, Res. of Whipple's 3d Add. prod.					Not filed.
6197 Feb. 28, 1895		College Ave.	Blk. 2, Res. of Whipple's 3d Add. prod.	Holly St.				Pending.
6194 Feb. 28, 1895		Indiana Ave.	Twenty-fourth St.	Twenty-sixth St.				Pending.
6206 Mar. 6, 1895		Alley immediately south of Eighteenth St.	Independence Ave.	Ninth St.				Not filed.
6207 Mar. 6, 1895		Alley between Holly St. and West Prospect Pl.	Forest Ave.	Tracy Ave.				Not filed.
6209 Mar. 6, 1895		Holly Street	Twenty-seventh St.	Twenty-eighth St.				Not filed.
6210 Mar. 6, 1895		Charlotte St.	Twenty-third St.	Twenty-fourth St.				Not filed.
6211 Mar. 6, 1895		Twenty-first St.	Sixth St.	Ninth St.				Not filed.
6212 Mar. 6, 1895		Eleventh St.	Charlotte St.	Campbell St.				Not filed.
			Walton Ave.	Indiana Ave.				Not filed.

GRADING CASES COMPLETED DURING FISCAL YEAR ENDING APRIL 15, 1895.

Ordinance. No.	Approved.	Street.	From	To	Verdict Rendered.	Benefits,		Remarks.
						Kansas City.	Property Owners.	
5,517	Dec. 6, '93	Alley N. of 14th St.	Virginia Ave.	Lydia Ave.	Nov. 10, '94			Complete.
5,023	Apr. 13, '93	Alley bet. Flora Ave and Grove St.	Howard Ave.	Twenty-Fourth St.	Nov. 17, '94			Dismissed. Damages exceed benefits.
5,472	Nov. 6, '93	Twenty First St.	Southwest Boulevard	West Prospect Place	July 28, '94			Complete.
5,224	May 26, '93	Alley S. of Tenth St.	Michigan Ave.	Euclid Ave.	Mar. 8, '94			Complete.
5,528	Dec. 26, '93	Alley bet. Summit St. and Jefferson St.	Alley S. of 16th St.	Seventeenth St.	Nov. 27, '94			Complete.
5,450	Oct. 12, '93	Alley S. of Sixteenth St.	Summit St.	Jefferson St.	June 30, '94			No claims. Complete.
5,476	Nov. 6, '93	Campbell St.	Sixteenth St.	Eighteenth St.	Nov. 8, '94			Complete.
5,591	Feb. 8, '94	Monroe Ave.	Windsor Ave.	Scarritt Ave.	Nov. 3, '94			No claims. Complete.
5,592	Feb. 8, '94	Alley bet. Park Ave. and Olive St.	Sixth St.	Eighth St.				Repeated.
5,598	Feb. 8, '94	Alley bet. Main St. and Walnut St.	Alley immediately So. of Thirtieth St.	Thirty-First St.				Dismissed.
5,615	Mar. 9, '94	McGee St.	Eleventh St.	Twelfth St.	Nov. 10, '94			Complete.
5,616	Mar. 9, '94	Twenty-First St.	Charlotte St.	Campbell St.				Dismissed.
5,678	Mar. 24, '94	Alley immediately S. of Thirteenth St.	Washington St.	West line of Broadway Addition and South along Broadway Ad- dition to North line of Lawton Place.	Dec. 15, '94			Repeated, Ord. 6,048.
5,772	Apr. 14, '94	12th St. and 13th St.	Virginia Ave.	Lydia Ave.	Oct. 27, '94			Complete.

GRADING CASES COMPLETED DURING FISCAL YEAR ENDING APRIL 15, 1895, CONTINUED.

Ordinance.		Street.	From	To	Verdict Rendered.	Benefits.		Remarks.
No.	Approved.					Kansas City.	Property Owners.	
5,920	Aug. 11, '94	Forest Ave.	Twenty-Ninth St.	Thirty-First St.	Nov. 8, '94			No claims. Complete.
5,959	Sep. 7, '94	Alley bet. Jefferson St. and Penna. Ave.	Eleventh St.	Twelfth St.	Jan. 14, '95			No claims. Complete.
5,964	Sep. 13, '94	Alley bet. Tracy Ave. and Lydia Ave.	Twenty-Third St.	Twenty-Fourth St.	Mar. 26, '95			Complete.
5,965	Sep. 13, '94	Dunham Ave.	Agnes Ave.	Indiana Ave.	Dec. 8, '94			Dismissed. Damages exceed benefits.
6,048	Oct. 25, '94	Alley immediately S. of Thirtieth St.	Washington St.	West line of Broadway Addition and South along Broadway Ad- dition to North line of Lawton Place.	Dec. 15, '94			No claims. Complete.
6,074	Nov. 14, '94	Twenty-Ninth St.	Bellevue Ave.	Summit St.	Apr. 8, '95			No claims. Complete.
6,095	Nov. 28, '94	Alley bet. Troost Ave. and Forest Ave.	Twenty-Sixth St.	Twenty-Seventh St.	Feb. 14, '95			No claims. Complete.
5,475	Nov. 6, '93	Harrison St.	Eighteenth St.	Nineteenth St.	July 14, '94			No claims. Complete.
6,099	Nov. 28, '94	Twenty-Sixth St.	Wyandotte St.	Baltimore Ave.	Mar. 9, '95			No claims. Complete.
6,100	Nov. 30, '94	Maiden Lane.	Pennsylvania Ave.	Washington St.	Jan. 14, '95			No claims. Complete.
6,111	Dec. 12, '94	Oak St.	Twenty-Sixth St.	Twenty-Seventh St.	Mar. 26, '95			No claims. Complete.
6,013	Oct. 5, '94	Alley bet. Penna. Ave. and Washington St.	Alley S. of 16th St.	Seventeenth St.	Feb. 18, '95			No claims. Complete.
6,144	Jan. 16, '95	Twentieth St.	Olive St.	Prospect Ave.	Mar. 23, '95			No claims. Complete.

RECAPITULATION OF PUBLIC WORK COMPLETED DURING FISCAL YEAR ENDING APRIL 15, 1895.

Page No.	Nature of Work.	No. of Con-tracts.	Cubic Yards.	Square Yards.	Lineal Feet.	Miles.	Number of Bills.	Amount.
64-68	Paving Streets.....	38	.....	195,980.46	49,588.35	9.39	2,170	\$408,024.20
69	Paving Alleys.....	5	.....	2,391.40	1,857.60	.....	74	3,046.87
72	Curbing.....	15	.....	.....	25,352.50	4.907	275	11,455.83
73	First-Class Sidewalks.....	11	.....	.....	18,565.38	3.31	75	20,987.20
74	Plank Sidewalks.....	29	.....	12,302.30	13,521.50	2.56	231	3,525.15
75	Street Grading.....	11	58,096.20	.....	8,479.53	1.61	771	11,006.38
76	Alley Grading.....	9	8,831.30	.....	3,990.77	.....	280	11,866.18
77-81	District Sewers.....	4	.....	.....	36,513.70	6.75	1,467	81,834.41
84	Public Sewers.....	1	.....	.....	14,125.10	2.675	.....	4,993.90
82	Repairs First-Class Sidewalks.....	.....	.....	.....	.....	.....	117	6,743.08
83	Repairs Second-Class Sidewalks.....	.....	.....	.....	.....	.....	1,951	1,615.45
85	Public Work Authorized by Ordinance.....	8	.....	.....	.....	.....	.....	1,970.45
86	Public Work Paid for by Donor.....	11	.....	.....	87,352.50	7.06	3,380	14,965.47
87-88	Cleaning and Sprinkling Streets.....	21	.....	.....	101,253.50	19.18	8,381	17,518.50
89	Sprinkling Streets.....	47	.....	.....	54,555.00	10.34	4,656	11,906.03
80	Cleaning Streets.....	19	.....	.....	.....	.....	.....	.....
							23,404	\$597,081.09

**STATEMENT OF EXPENDITURES OF ENGINEERING DEPARTMENT DURING FISCAL
YEAR ENDING APRIL 15, 1895.**

PAY ROLL—		
Engineering Department, Salaries.....	\$40,072.88	
Engineering Department, Horse Hire	1,241.48	
Steam Road Roller.....	1,064.22	\$42,378.58
MISCELLANEOUS EXPENSE—		
Abstracts, Condemnations.	125.25	
Abstracts, Grading.....	524.69	
Abstracts, General Information	52.05	701.99
Blue Prints.....		51.74
Rent of Armstrong's Steam Road Roller		255.00
SUNDRY MISCELLANEOUS EXPENSE—		
Rent of Ground for Storing Material for Union Avenue.....	45.50	
To Globe Foundry Co., for Use of Rattler Testing Brick.....	22.75	
To Woodward, Faxon & Co., for Weights for Testing Machine.....	9.80	
To S. J. Hare, for Brick Testing Scales.....	1.80	
To E. L. Swope, Services with Typewriter.....	8.25	87.60
		\$43,474.91

Respectfully submitted,
H. H. FILLEY,
City Engineer.

SIXTH ANNUAL REPORT
—OF THE—
DEPARTMENT OF STREETS,
KANSAS CITY, MISSOURI,
—TO THE—
BOARD OF PUBLIC WORKS,
—FOR THE—
FISCAL YEAR ENDING APRIL 15, 1895.

THOS. A. DODDS, Superintendent.

J. W. HUMPHREY, Chief Clerk.

DEPARTMENT OF STREETS.

KANSAS CITY, Mo., April 15, 1895.

*To the Honorable Board of Public Works,
Kansas City, Mo.:*

GENTLEMEN:—I have the honor to submit herewith my report of the operations of the Street Department for the fiscal year ending April 15, 1895:

In assuming charge of the Street Department I determined to equalize, as much as possible, the expenditures of all monies allowed this department for the good of the whole city. That some sections had been neglected (notably the wholesale section in the West Bottoms) was evident. This was given immediate attention by a general cleaning, and later on repairs were made on many of the streets.

Wyoming street, between Twelfth and Seventeenth, was paved with bank gravel in 1892, at an expense of \$4,000.00. This pavement was a failure, it being subject to heavy traffic and having but a slight grade. In June, 1894, the street was repaired with macadam at an expense of \$600.00, and at the present time is badly in need of further repairs. I would recommend that it be paved with granite blocks, as no other pavement will stand the traffic to which the street is subjected.

Allen avenue, one of the connecting links between the wholesale and retail sections of the city, was repaired at an expense of \$389.00, and from an impassable condition was made so that it has had continuous travel since.

The repairing of Lincoln street has greatly relieved Bluff street and the Fourth street viaduct. The cost of repairs on this street, from Twelfth to Bluff, was \$386.00. The street is now in splendid condition, and will need very little attention this season.

Holly street, from Twelfth to Seventeenth, is now impassable. I would recommend it be improved. The work could be done at small expense, as all the material necessary to make a good roadway is to be found on the side of the hill along the street. The improving of this street would give another outlet to the West Bottoms, which is badly needed.

Bluff street, from Fifth to its intersection with St. Louis avenue, was found to be in bad condition, the surface having become uneven. The stone blocks were taken up and relaid, making a good wearing surface that will last for a number of years. In this work of construction there was 4,577 square yards of stone pavement laid, the cost of which was \$937.62, or about 20½ cents per square yard. The lowest estimate made for this work was \$1,500.00.

Baltimore avenue, between Fourteenth and Sixteenth, Twenty-Sixth, between Grand avenue and Locust street, and Holmes street, between First and Third and Sixth and Eighth, were all in an almost impassable condition. Repairs were made with macadam, thoroughly rolled, at a very slight expense, and these streets are now in good condition.

A notable feature in repair work on the streets the past season has been the use of the grader. A large number of dirt streets in all parts of the city have been resurfaced, washouts filled, and the streets placed in good condition.

The construction and repair of street crossings has been pushed, and if there is any portion of the city not supplied it is because request for same has not been made to this

department. All work has been done with oak lumber. The carpenter force consists of two gangs of men; one carpenter, four laborers and one team to each gang. I feel very much gratified at the good work done by this force. During the past season they have constructed 884 crossings, repaired 865 old crossings, and, with the addition of the work done on bridges and viaducts, have used during the past season 478,609 feet of new and old lumber. In no month during the year have they made full time, the average being eighteen days.

The Fourth street viaduct was refloored at an expense of \$554.55. The James street viaduct has also been refloored and repaired at an expense of \$664.50. The iron work on these two structures should be painted at once, which will put them in first-class condition.

The keeping in repair of bridges throughout the city is no small item of expense, and it has been the aim of the department (whenever possible) to fill in and remove the same. During the past year three bridges over old O. K. creek have been removed and the channel filled, viz.: The one on Nineteenth street, between Charlotte street and Campbell street; one on Locust street, between Twentieth and Twenty-first streets, and on Charlotte street between Nineteenth and Twentieth streets. The fill is almost made at the Holmes street bridge, between Nineteenth and Twentieth streets, and will be completed as soon as the cable railway is ready to put in their conduits. The bridge on Troost avenue, between Seventeenth and Eighteenth streets, will also be removed and the fill made as soon as the cable company can unite with this department in the work. All of the bridges mentioned were in bad condition, and if they had not been removed general repairs, at considerable expense, would have been necessary. The fills were mostly made with dirt taken from the streets by the cleaning gangs. Two contractors were induced by this department to dump dirt, they

were removing, at these points, completing the work and saving this expense to the city.

Examination of the Main street sewer, from the Market House to the river, showed the necessity of immediate repair, and the same was ordered done by your Honorable Body. Continuous repairs were made between these points, a distance of 1,781 feet. The work consisted in concreting the floor, and then paving it with brick. In this work there were 890 square yards, requiring 60,000 brick. 140 feet of side walls of sewer were lined with brick and 156 feet arched. All of this work was done with the best of material and by experienced sewer men, and the entire cost was \$4,035.76, or about \$2.50 per running foot. That portion of the sewer between the Market House and Ninth street is in bad condition, and I would recommend that the repairs be continued to Ninth street at as early a date as possible. With the same class of work done on this section the sewer will last for many years.

The public fountains have received careful attention. Owing to the continued drouth during the winter and spring, special efforts were made to keep them in continuous running order. A competent plumber has had charge of this branch of the department, and, for the first time since the fountains have been placed on the streets, they have been kept in condition for continuous service. Hundreds of families have depended on them for water.

In the cleaning of streets it has been our aim to devote to each street that portion of expense that the travel on such street justified. A record has been kept of all work, in order that this might be done. Our work has been handicapped through lack of appliances with which to work. With only three sweeping machines, and these almost worn out, with no allowance for sprinkling before sweeping, we have been placed in a position to be criticised. In addition to the sweeping machines, from

five to seven gangs of men, with hand appliances, have been employed, representing a force of from fifty to seventy men. Another feature of the cleaning work, has been the care of the block bounded by Eleventh, Twelfth, Main and Walnut. This has been done by one man, with a small hand cart and hand appliances. The results obtained from this work have been so satisfactory, that I believe the system should be used in all the business sections of the city, as an aid or adjunct to the regular street cleaning force, as by such means the streets can be cleaned, and kept clean, during business hours, when street sweeping machines cannot be used. With three or four new and improved sweeping machines, a sufficient number of hand-carts, and with sprinkling wagons to sprinkle in advance of the sweepers, I feel that I could give the city clean streets. No record was kept of the amount of dirt taken from the streets until January 1st last. From that date until the close of the fiscal year (April 15th), there was removed 4,927 loads, or 12,317 cubic yards.

The problem of cleaning and sprinkling streets, especially the business streets, paved with asphalt, would be much simplified if the city was in a position to furnish free water for flushing purposes. The streets could be flushed three times a week (the work being done at night), and with the work of hand carts before mentioned, to clean up all accumulations of dirt and droppings during business hours, the sprinkling and cleaning of the streets by the city or by contract could be dispensed with, and I am of the opinion that the work done would be much more satisfactory than the present system, and that the expense of doing the work would be considerably less.

An examination of the tabulated report will show in detail how every dollar given this department has been expended. Every street in Kansas City upon which work has been done is mentioned, giving the total cost of the work done, and also

showing the character of the work. The total footings will also show the amounts expended in cleaning, repairs on streets, sewer maintenance, sidewalks, cross-walks, bridges, etc.' The cost of all contracted cleaning and sprinkling for the past year is given, and a comparative statement of cost of cleaning by the city and by contractors. It also shows that this department has issued 2,080 permits for various excavating purposes.

TOM. A. DODDS,

Superintendent of Streets.

SUMMARY.

Pay roll from April 16 to 30, 1894.....	\$ 2,604.12	
Accounts paid April 16 to 30, 1894.....	673.80	\$ 3,277.92
Pay roll for month of May, 1894.....	5,347.78	
Accounts paid month of May, 1894.....	608.56	5,956.34
Pay roll for month of June, 1894.....	5,410.91	
Accounts paid month of June, 1894.....	1,445.59	6,856.50
Pay roll for month of July, 1894.....	7,033.79	
Accounts paid month of July, 1894.....	1,366.16	8,399.95
Pay roll for month of August, 1894.....	5,409.74	
Accounts paid month of August, 1894.....	1,754.42	7,164.16
Pay roll for month of September, 1894.....	5,218.87	
Accounts paid month of September, 1894.....	800.44	6,079.31
Pay roll for month of October, 1894.....	5,138.32	
Accounts paid month of October, 1894.....	1,229.13	6,367.45
Pay roll for month of November, 1894.....	4,501.88	
Accounts paid month of November, 1894.....	1,024.92	5,526.80
Pay roll for month of December, 1894.....	4,585.17	
Accounts paid month of December, 1894.....	797.30	5,382.47
Pay roll for month of January, 1895.....	4,029.88	
Accounts paid month of January, 1895.....	1,183.48	5,213.36
Pay roll for month of February, 1895.....	4,488.40	
Accounts paid month of February, 1895.....	1,641.35	6,129.75
Pay roll for month of March, 1895.....	5,464.08	
Accounts paid month of March, 1895.....	2,283.97	7,748.05
Pay roll for month of April, 1 to 16, 1895.....	3,727.18	
Accounts paid month of April, 1 to 16, 1895.....	1,889.91	5,617.09
Total expense from April 16, 1894, to April 16, 1895.....	\$79,219.15	
Estimated value of material on hand April 16, 1894.....		2,066.50
Total.....		\$81,285.65

ATYON LENOZ AND
THEIR FOUNDATIONS.

Date.

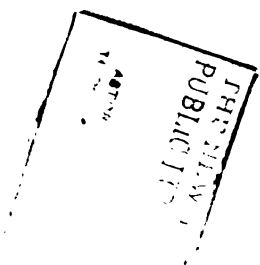
April 16, 1904, to April 16, 1895

	Bridges.		Miscellaneous.		Total Expense.
	Material.	Labor.	Material.	Labor.	
Adal					\$ 13.39
Agne					154.97
Aldis	\$ 1.17	\$ 7.21	\$0.04	\$ 0.73	2.22
Alles					412.43
Amie			3.63	1.69	5.83
Ande					13.11
Aske					79.05
Bale					52.71
Balt	.94	.84	1.58	1.57	645.06
Bant					1.64
Bell					327.64
Belle	4.26	13.63			166.29
Belie			.08	.93	320.46
Belv					12.69
Bluf					24.65
Bros	1.65	6.25			1,129.74
Brod			.05	.84	436.06
Brod	1.99	11.36		.66	2.67
Cam					519.00
Cant					12.24
Chan					365.39
Ches		6.00			218.97
Ches					773.53
Ches					476.49
Clev	5.15	12.14		253.64	665.11
Colle	.15	4.70	.14	2.94	29.99
Cott					142.98
Dela	1.07	.75			15.13
Dora				.60	386.86
Dun					2.72
Dyke					21.35
Eight					.80
Eight	.08	.84			1,215.00
Eight					192.42
Eight					669.12
Total	\$16.46	\$63.72	\$5.52	\$263.60	\$9,507.61

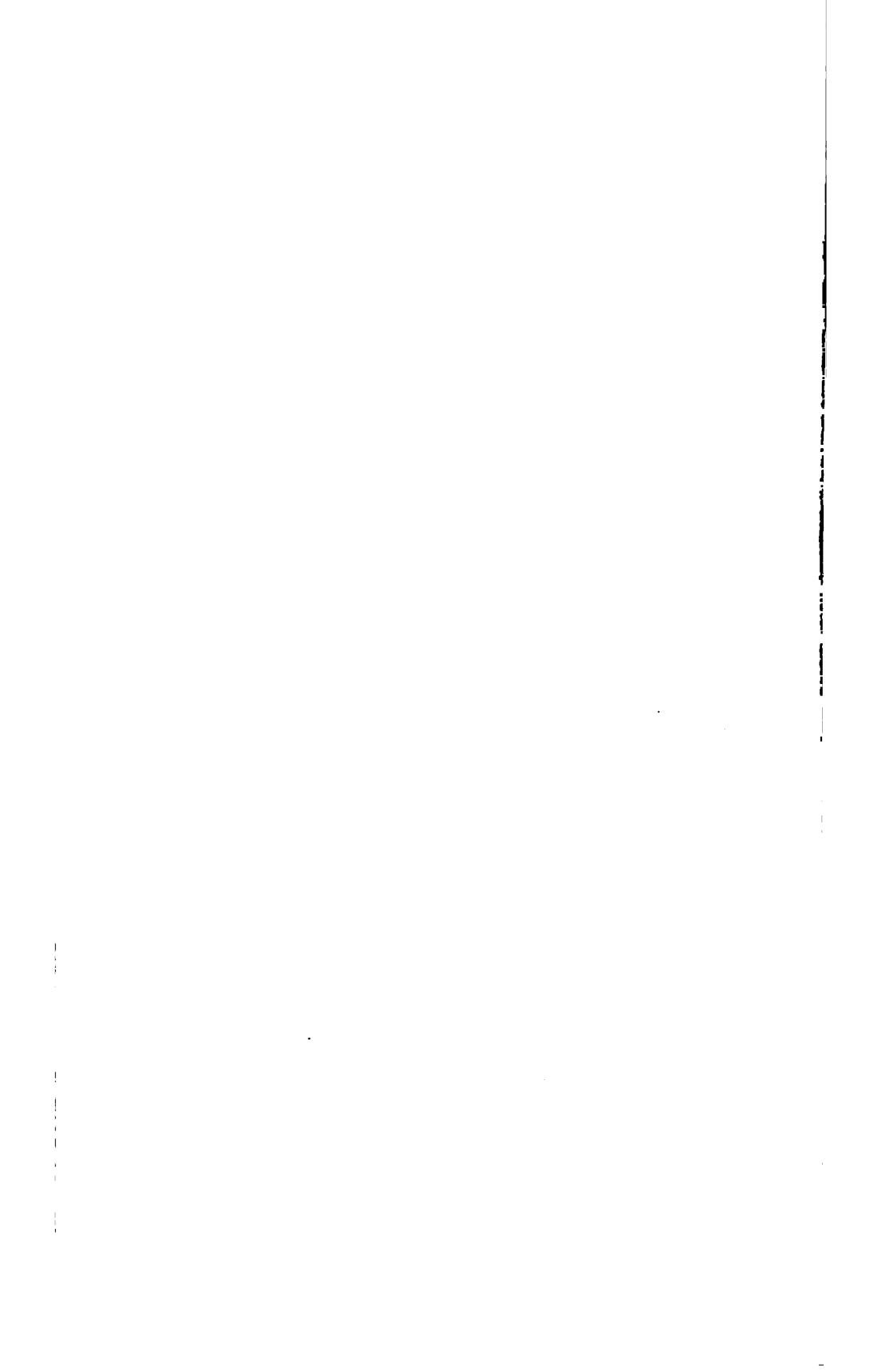
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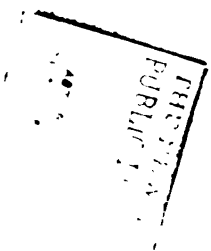
Date.	Hr.	Bridges.		Miscellaneous.		Total Expense.
		Material.	Labor.	Material.	Labor.	
Mar. 16, 1894, to April 16, 1895	90	\$ 16.46	\$ 63.72	\$ 5.52	\$263.60	\$ 9,507.61
						647.84
				13.50	26.25	949.81
						475.33
						21.37
						189.23
	59					17.56
		1.25	1.60	1.25	1.62	819.20
						155.05
	26			.18	8.37	443.05
						270.04
						138.79
	85					223.52
						662.97
						780.57
						438.45
						294.66
	01	656.09	258.18			1,385.01
						3.15
						211.41
						33.95
		114.47	71.31			254.56
						100.11
						23.48
	42	2.50	9.33		.90	1,934.54
						10.16
						10.21
						157.13
						232.04
						9.11
						5.43
						247.91
						664.05
	45					301.36
						93.99
Total	67	\$790.77	\$404.14	\$20.48	\$295.74	\$21,705.16



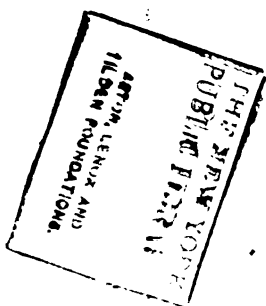
Date.		Bridges.		Miscellaneous.		Total Expense.
		Material.	Labor.	Material.	Labor.	
1894, to April 16, 1895	Total	\$790.77	\$404.14	\$20.48	\$295.74	\$21,705.16
	Holm	7.73	16.70			1,104.67
	Howe	1.70	3.58	2.41	7.62	227.79
	Inde			1.91	5.63	501.71
	India					285.74
	Jeffe	.68	.84	.15	5.05	890.24
	Joy					7.42
	Kane	2.00	5.06			168.28
	Laun					9.05
	Lexi			.03	.84	165.79
	Libe					349.25
	Linc					516.15
	Locu	.51		12.52		404.19
	Lydia			.30	3.34	246.07
	Madi	.04	.85			643.09
	Main					1,031.22
	Maple					5.71
	May					25.73
	Merc					53.02
	Mich					179.64
	Mill					
	Minn					20.67
	Misc					531.62
	Misc					70.70
	Mont					115.05
	Mood					3.49
	Morre					19.13
	Mulbr					540.87
	McCo					4.65
	McGe					187.34
	Niche					153.38
	Ninet	.80	120.14	.08	.77	759.79
	Ninet			2.45	.84	203.17
	Ninth				.84	852.56
	Ninth			.48	4.39	571.32
	Total	\$804.23	\$551.31	\$40.81	\$325.10	\$32,064.00



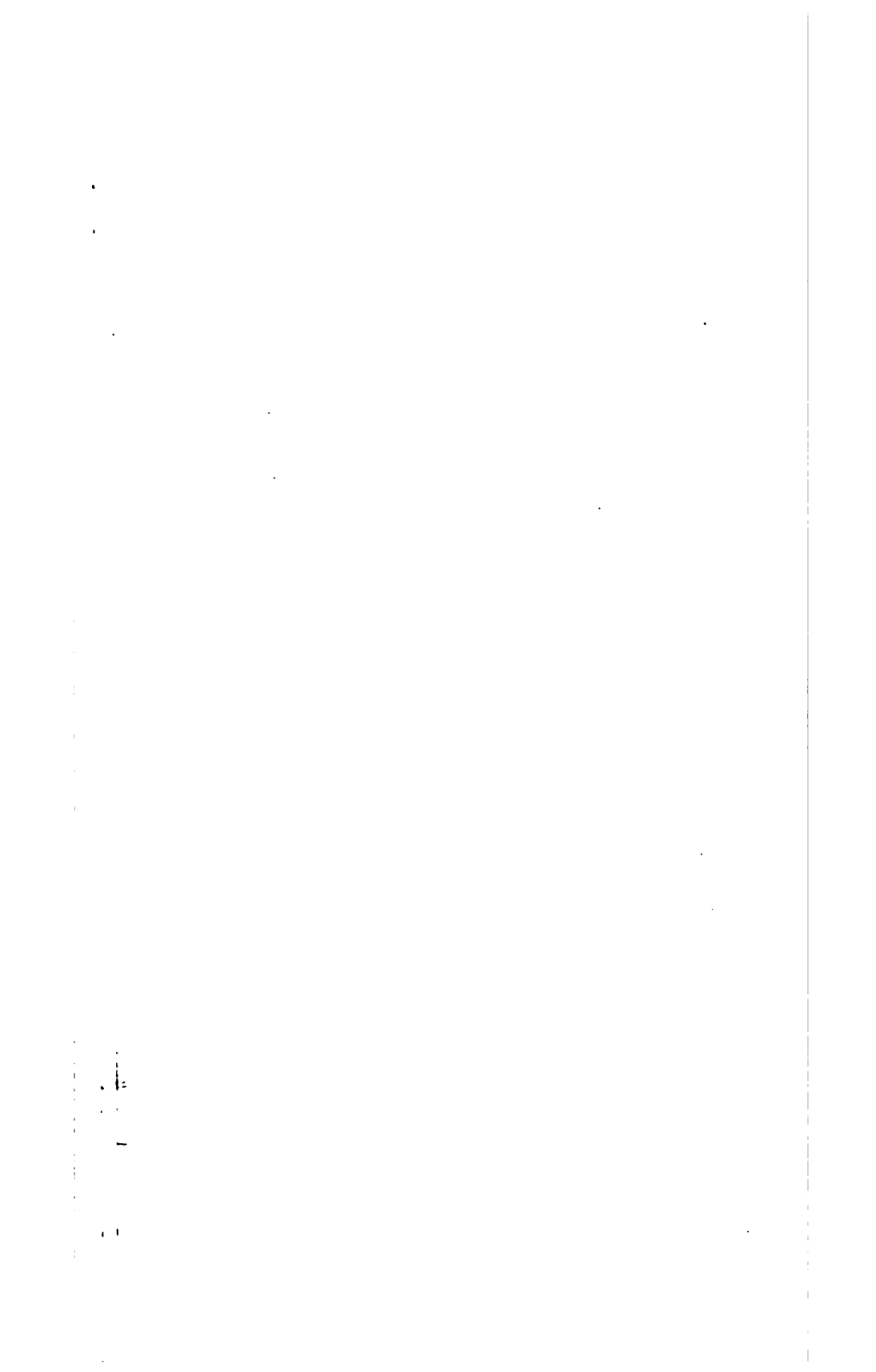
Date.	Bridges.			Miscellaneous.		Total Expense.
	labor.	Material.	Labor.	Material.	Labor.	
April 16, 1894, to April 16, 1895	85.81	\$804.23	\$551.31	\$40.81	\$325.10	\$32,064.00
						165.92
						60.37
	.84	2.83	6.68			595.30
						136.75
						344.79
						41.51
						16.96
		95.47	95.25			415.61
						16.60
				2.69	3.37	476.28
						22.17
						26.22
						64.15
						16.42
						255.90
						10.01
						14.63
	1.60			.20	6.50	936.96
		.45	7.48			293.66
	3.37			.50	6.91	467.53
	1.70	.46	1.69			356.92
	14.78					562.04
				.13	1.69	456.49
	1.69					610.75
						637.76
						56.03
	4.20	21.03	90.33		6.36	1,360.42
		.80	.84	1.36	.84	247.55
				.10	.78	205.39
		1.60	3.10			685.33
						725.78
		2.93	18.82	.89	3.38	251.45
	3.37					103.42
						350.62
	7.36	\$929.90	\$775.50	\$46.68	\$354.93	\$43,044.81



Date.	No.	Bridges.		Miscellaneous.		Total Expense.
		Material.	Labor.	Material.	Labor.	
1934, to April 16, 1935	Total 36	\$929.80	\$775.50	\$46.64	\$334.95	\$43,048.81
	Th					41.54
	Th					681.22
	Th 23					231.10
	Th					108.57
	Th					17.68
	Th					128.32
	Th					42.22
	Th					480.15
	Th	.32	.87			423.21
	Th	2.14	8.40			
	Th 39			1.78	4.34	1,161.13
	Th 38			.47	9.41	1,065.94
	Th	24	8.45		.84	595.16
	Th		30.80			279.49
	Th					75.56
	Th					15.77
	Th	.93	.84		3.66	229.24
	Th	24	2.64	.57	8.74	175.01
	Th 41	.41	2.31			187.91
	Th			2.37	7.61	292.31
	Th					197.91
	Th 41	.15	1.35		9.00	340.40
	Th					84.30
	Th					309.41
	Th	12.30	18.23	.15	2.94	240.03
	Th					6.59
	Th					160.41
	Th 13					154.47
	Th					207.31
	Th	.55	1.74			37.42
	Th 15	3.11	4.98	.05	.73	244.84
	Th 05			.12	.93	143.92
	Un			.05	1.23	356.03
	Vill					4.79
	Vin 69	33.21	132.56		5.06	682.33
	Total 26	\$983.84	\$948.39	\$52.24	\$404.50	\$52,572.42



Date.	Por.	Bridges.		Miscellaneous.		Total Expense.
		Material.	Labor.	Material.	Labor.	
April 1, 1894, to April 16, 1895	26	\$ 983.84	\$ 989.38	\$52.24	\$404.50	\$52,572.42
	43					118.90
	80		8.58		2.38	290.78
		62.68	17.75			70.93
		.25	7.49			1,092.60
	87					311.85
		.13	19.86			310.58
						128.14
	97					41.50
						82.40
	70					467.47
		1.90	6.66			8.22
						500.37
						1,037.71
						13.75
						19.10
						2.90
						4.00
						4.05
	73	\$1,048.80	\$1,043.23	\$52.34	\$406.88	\$57,012.52
Work on Streets April 16, 1896	86		\$2,092.02		\$459.12	\$57,012.52



Date	Mountains.		James St. Viaduct.		General Work.		Total Expense.
	Sal.	Labor.	Material.	Labor.	Material.	Labor.	
April 16, 1894, to							0 106.06
							119.02
							890.38
							3,828.11
							143.06
							482.37
		\$359.08					415.76
			\$475.75	\$179.85			655.60
					\$4.95	\$1,469.73	1,474.68
		\$359.08	\$475.75	\$179.85	\$4.95	\$1,469.73	\$4,064.03
Totals April		\$415.76		\$655.60		\$1,474.68	\$4,064.03

WORK DISTRIBUTED ON ALLEYS.

Date.	Alleys.	Cleaning.	Paved Alleys.		Unpaved Alleys.		Sewer Maintenance.		Total Expense.
			Material.	Labor.	Material.	Labor.	Material.	Labor.	
April 16, 1894, to April 16, 1895	General Cleaning.....	\$810.20							\$ 810.20
..	General Repairs.....		\$6.23	\$62.24					68.47
..	General Repairs.....				\$10.80	\$83.23			94.03
..	Flushing and Repairing Sewers.....						\$53.82	\$141.76	495.58
	Totals.....	\$810.20	\$6.23	\$62.24	\$10.80	\$83.23	\$53.82	\$141.76	\$1,468.28
	Totals April 16, 1894, to April 16, 1895.....	\$810.20		\$68.47			\$91.03	\$195.58	\$1,468.28

SUMMARY.

Total Expense on Streets and Alleys and Miscellaneous Work	\$ 66,544.83
Miscellaneous Expense Account.....	10,487.53
Total Expense from April 16, 1894, to April 16, 1895.....	\$ 77,032.36
Estimated amount of material on hand April 15, 1895.....	4,253.29
Total.....	\$ 81,285.65

STREETS SPRINKLED BY CONTRACT.

Street.	From.	To.	Completed.	Ended.	Completed.	Ended.	Lineal Feet on Street.	Time.	No. Times Sprinkled Per Day.	Price Per Lineal Foot Per Month.	Total Cost for Sprinkling.	Deduction to Comply with Ordinance.	Total Issue in Tax Bills.
			1894	1894	1895	1895		Months Days					
Bluff	Fifth	St. Louis	June 14	Nov. 30	Mar. 1	Apr. 15	1,087	1	4	03	228 21	•	228 21
Broadway	Eleventh	Sixteenth	Mar. 1	Oct. 31	Mar. 1	Apr. 15	2,244	8	3	02	559 04	•	559 04
Broadway	Third	Eleventh	Apr. 16	Nov. 30	Mar. 1	Apr. 15	2,770	8	3	02 33	705 51	•	705 51
Campbell	Ninth	Sixteenth	Apr. 16	Nov. 30	Mar. 1	Apr. 15	3,207	8	3	02 33	793 73	•	793 73
Charlotte	Ninth	Independence	Mar. 1	Oct. 31	Mar. 1	Apr. 15	984 1/2	7	3	02 1/2	182 41	• 2.11	180 30
Central	Fifth	Ten	Mar. 1	Oct. 31	Mar. 1	Apr. 15	1,761	7	3	02 1/2	307 12	•	307 12
Cherry	Fourteenth	Nineteenth	June 2	Nov. 30	Mar. 1	Apr. 15	2,850	7	4	03 1/2	421 70	•	421 70
Eleventh	Santa Fe	Liberty	June 5	Nov. 30	Mar. 1	Apr. 15	1,019	7	4	03 1/2	199 32	•	199 32
Eleventh	Mill	Hickory	Mar. 1	Oct. 31	Mar. 1	Apr. 15	2,339	7	3	02 1/2	415 30	•	415 30
Eleventh	Main	Summit	Mar. 1	Oct. 31	Mar. 1	Apr. 15	2,832	7	3	01 3/4	396 48	•	396 48
Fourteenth	Virginia	Woodland	Apr. 16	Nov. 30	Mar. 1	Apr. 15	1,711	8	3	02 3/5	490 32	•	490 32
Fifteenth	Main	Campbell	Mar. 1	Oct. 31	Mar. 1	Apr. 15	2,893	7	3	01 1/2	433 96	•	433 96
Fifteenth	Virginia	Prospect	June 7	Nov. 30	Mar. 1	Apr. 15	4,816	7	4	03 19-20	1,233 40	•	1,233 40
Forest	Independence	Fifth	Apr. 17	Nov. 30	Mar. 1	Apr. 15	1,375 1/2	8	2	02 1/2	340 47	•	340 47
Genesee	Twelfth	Sixteenth	Mar. 1	Oct. 31	Mar. 1	Apr. 15	1,821	7	3	01 3/4	254 94	•	254 94
Grand	Eight	Twenty-First	Mar. 1	Oct. 31	Mar. 1	Apr. 15	5,954	7	3	03 1/2	1,667 12	•	1,667 12
Harrison	Sixteenth	Eighteenth	Apr. 16	Nov. 30	Mar. 1	Apr. 15	981	8	2	02 3/4	280 49	•	280 49
Hickory	Ninth	Fourteenth	Mar. 1	Oct. 31	Mar. 1	Apr. 15	2,178	7	3	01 10-11	331 84	•	331 84
Holmes	Third	Independence	Mar. 1	Oct. 31	Mar. 1	Apr. 15	1,500	7	3	02 19-100	261 84	• 96	260 88
Hickory	Eight	Ninth	May 28	Oct. 31	Mar. 1	Apr. 15	251	5	3	01 1-16	15 01	•	15 01
Liberty	12th to a point 300 ft. s. of 17th	Eighteenth	Apr. 17	Nov. 30	Mar. 1	Apr. 15	2,925	8	2	02 3/4	724 05	•	724 05
Locust	Twelfth	Twentieth	Mar. 1	Oct. 31	Mar. 1	Apr. 15	4,541	7	3	01 3/4	635 74	•	635 74
Main	Eleventh	Twentieth	Mar. 1	Oct. 31	Mar. 1	Apr. 15	3,910	7	3	02 1/2	703 80	•	703 80
Missouri Ave	Delaware	Forest	Mar. 1	Oct. 31	Mar. 1	Apr. 15	4,591	7	3	01 1/2	459 10	•	459 10
Mulberry	Eleventh	Thirteenth	Mar. 1	Oct. 31	Mar. 1	Apr. 15	1,931	7	3	01 9-10	293 52	•	293 52
Ninth	Santa Fe	Mulberry	Mar. 1	Oct. 31	Mar. 1	Apr. 15	884	7	3	03 4-10	73 72	•	73 72
Ninth	Grand	Locust	Mar. 1	Oct. 31	Mar. 1	Apr. 15	886	7	3	02 1-20	155 28	•	155 28
Totals carried forward											912,394.02	615.77	912,320.25

SUMMARY OF STREET CLEANING AND SPRINKLING FROM APRIL 16, 1894, TO APRIL 16, 1895.

	Commenced.	Ended	Commenced.	Ended.	Miles.	Cost.	Total Cost.
Cost of cleaning paved streets by contractors.....	April 16, 1894	Dec 31, 1894	.....	.....	17 ¹ / ₂	\$25,321.21	.....
Cost of cleaning paved streets by contractors.....	.....	.....	March 1, 1895	April 16, 1895	4 9-10	707 68	\$24,028.89
Cost of cleaning paved streets by Dept of Streets.....	April 16, 1894	Dec 31, 1894	.....	.....	66	16,949.83	.....
Cost of cleaning paved streets by Dept of Streets.....	.....	.....	Jan. 1, 1895	April 16, 1895	74 6-10	9,596.15	26,335.94
Cost of sprinkling streets by contractors.....	April 16, 1894	Dec 31, 1894	.....	.....	26 1-5	21,567.94	.....
Cost of sprinkling streets by contractors.....	.....	.....	March 1, 1895	April 16, 1895	7	1,714.67	23,286.61
Total cost of Cleaning and Sprinkling streets, April 16, 1894, to April 16, 1895							\$73,851.48

(There was no sprinkling done by this department the past season.)

PERMITS FOR EXCAVATIONS.

Months of 1894-5.	Water.			Total Water Exca- vations.	Sewer.		Gas.		Setting and Resetting Poles.					Total Permits Issued.	
	By Plumbers.		By Nat'l Water Works. Exten- sion.		By Plumbers and Sewer Builders.		By Kansas City Gas Light & Coke Co.	Electric Light.	Telegraph and Telephone Cos.						
	Const.	Repairs.			Service.	Const.			Repairs.	Total Sewer Exca- vations.	Repairs.	Exten- sions.	Kansas City.		American Western Union.	Postal.	Missouri and Kansas.
April 16 to 30, 1894.....	34	29	5	4	72	7	21	28	7	19	1	2	1	1	110
May, 1894.....	47	70	7	1	125	36	31	67	18	1	1	1	3	4	216
June, 1894.....	28	54	1	1	84	47	46	93	12	1	1	1	4	2	203
July, 1894.....	28	62	1	...	91	31	29	60	17	1	1	1	3	2	168
August, 1894.....	30	45	4	...	79	18	31	49	17	1	1	1	3	2	152
September, 1894.....	28	43	2	4	77	27	30	57	15	5	3	1	2	1	161
October, 1894.....	39	56	1	3	99	31	33	64	22	5	5	1	3	6	210
November, 1894.....	25	32	5	1	83	31	21	52	14	8	6	1	2	2	163
December, 1894.....	15	34	1	...	70	15	18	33	10	1	2	1	1	1	118
January, 1895.....	10	57	...	3	70	5	14	19	10	3	1	1	1	8	111
February, 1895.....	11	82	...	8	96	8	12	20	8	4	1	1	1	1	129
March, 1895.....	47	69	6	1	123	27	26	53	18	6	1	6	1	1	210
April 1 to 16, 1895.....	31	19	3	2	55	20	23	43	7	20	1	1	1	2	129
Totals.....	373	692	36	23	1,124	303	335	638	138	68	20	3	13	7	2,080

ANNUAL REPORT

—OF THE—

SUPERINTENDENT OF BUILDINGS,

—FOR THE—

FISCAL YEAR ENDING APRIL 15, 1895,

AT TWELVE O'CLOCK, NOON.

— — —

A. W. LOVE, Superintendent.

DEPARTMENT OF BUILDINGS.

*To the Hon. the Board of Public Works,
Kansas City, Mo.:*

GENTLEMEN:—I have the honor to submit herewith a report of the Department of Buildings for the fiscal year 1894.

The permits aggregate 1,787, at a total estimated cost of \$1,418,695.00. As it is the usual custom to underestimate the cost of buildings, rather than overestimate them, the actual cost of buildings and improvements in this City the past year would probably not fall far short of \$1,500,000.

Considering the extremely depressing financial situation throughout the country, which has, of course, been felt to some extent in this City, I consider the showing very good, the more especially since it shows a very gratifying increase over the fiscal year of 1893, when the permits aggregated not quite a million dollars. During the "glorious" boom period in Kansas City it was not uncommon for the cost of building improvements to reach from eight to ten million dollars annually, the banner year being 1886, when permits were issued to the amount of \$10,393,207. Since 1886, the decline was at first slow, 1888 showing up well with \$8,675,465, and then within two years, or the fiscal year 1890, showing but \$3,110,457; 1891, \$1,092,776; 1892, \$1,495,268, and 1893, \$998,746.

The indications for this season seem to point to renewed activity in the building line, which indicates that Kansas City has got her "second wind," and I trust that my report to your Honorable Body for the fiscal year 1895 will make a much more gratifying showing than even the present one.

A large number of splendid residences have been built the past year in the old Eleventh, Twelfth, Thirteenth and Four-

teenth wards, which are, of course, not embodied in this report, and which, if they were, would no doubt swell its aggregate at least another one hundred thousand dollars. Many costly residences are also to be built in the outlying districts the present season.

A great number of the hastily and poorly constructed houses built during the "boom" now badly need repairs; many of them have been repaired during the past two years and many more will no doubt be repaired the present season. I have ordered a great many of such houses repaired during the past year and expect to continue to do so when it can consistently be done without involving the City in litigation with the owners. I have endeavored, with the limited force at my disposal, to as nearly as possible enforce compliance with the building ordinances of the City, both in the erection and repair of buildings. One of the two inspectors of the department has had to devote considerable time the past year to an inspection and report under the

STATE FACTORY INSPECTION LAW,

which was made subsidiary to the Building department by Ordinance No. 5,794, approved April 16th, 1894, in conformity with an Act of the Missouri General Assembly, approved April 20th, 1891. The object of the legislative enactment is to provide for the health, safety and convenience of employes in all manufacturing, mercantile or other establishments, located in cities within the State containing over five thousand people. Under the provisions of the act, municipalities are required to provide for its enforcement by designating a suitable person to carry out its provisions and make semi-annual reports to the State Labor Commissioner, giving in detail, on blanks provided for that purpose, the condition of all places inspected. Since assuming control of this department, May 1st, 1894, I have caused to be made two semi-annual inspections and reports to the State Labor Commissioner, a tabular synopsis of which will be found hereinafter appended, and to which I respectfully

request your attention. In view of the fact that this inspection and report is required to be submitted on the first day of March and September of each year and of the increased activity in building operations in all parts of the City, and also the probability of important public work coming within my supervision during the next few months, I have requested, and the honorable Common Council has granted me, the services of an additional inspector for such time as may be deemed necessary by your Honorable Body.

NEW WORKHOUSE AND HOSPITAL.

At the request of, and by the concurrence of your Honorable Body, the City Council some months since by joint resolution directed this department to prepare plans and estimates for the construction of a new workhouse and hospital. This has been done and the plans are now on file in this office. It has, however, been found to be impossible to construct and equip the buildings, complete with heating and ventilating apparatus, etc., within the original contemplated cost of \$15,000 each. Indeed, the workhouse alone, when the cost of cells are included, will be near \$22,000, and the hospital will probably cost, complete, about \$20,000.

The County Court of Jackson County has been asked to assist the City in the erection of the hospital, inasmuch as many county charges are taken there for treatment each year. The Court now has the matter under advisement and have promised that if the County's finances are in such a condition as to make it possible, it will assist the City with a liberal appropriation toward the cost of the hospital.

The workhouse plans contemplate a building which I consider a model for a city prison. The sanitary arrangements, ventilation, floor plans, cell rooms, etc., are modeled after the most modern and approved architecture for that kind of a structure. The same may be said for the proposed new hospital.

These buildings are both badly needed by the City and if

the condition of the City's revenue will justify, both should be constructed during the coming summer and fall.

Considerable public work has been done under the supervision of this department during the past year. Frescoing the walls, ceilings, etc., of the City Hall, for which \$2,000 was appropriated, was very well done for \$1,365.50. Damage by fire at the Market House, which was fully covered by insurance, was repaired and the entire interior repainted from the funds received from the insurance companies. Electric lights operated by the City Hall plant have been installed in the City Market House, which will save the City quite an item of expense. Electric lights have also been installed in the old workhouse, as it was considered very unsafe to use coal-oil lamps in the old wooden building. Other much needed, temporary repairs were also made at the workhouse, but its condition is still a menace to persons confined therein. More or less expense has been found necessary in the proper maintenance of the City Hall and a carpenter has been employed from time to time for that purpose.

I would call your respectful attention to the list of official notices served during the past year for various purposes. In all cases I have urged a full compliance with orders given, and in several instances have been compelled to bring parties into Police Court for a persistent refusal to comply with official notices. All cases prosecuted were convicted.

In the case of the district known as the West Bluffs, which the City Council ordered me, in connection with the Health Department, to investigate and if possible renovate, I, in company with a health officer, made several trips along the ledges and under the "brow of the beetling bluffs," and found conditions there existing which are almost indescribable and which could hardly be believed to exist in a city considered as healthy as this. The filth of some of the houses and utter degradation of many of the inhabitants was something awful. I ordered several of the shanties torn down and others repaired and put in a better sanitary condition. Many of the people

begged to be allowed to remain in their humble and dirty home until the rigor of the winter months had passed, as they could find shelter no place else. This was allowed when they showed the proper disposition to clean up a little. The West Bluffs, in its present condition, will always be a menace to the health of that section of the City, as there are no sewer connections to speak of in that district. Some sensible means should be devised for bettering the condition of that locality.

Following is the tabulated statements showing the business of the office during the past year:

BUILDING PERMITS ISSUED AS FOLLOWS:

APRIL 16TH, NOON, TO APRIL 30TH, 1894.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	1	25	\$ 4,000 00	\$ 2 00
Brick Residence.....	6	165	23,300 00	11.65
Brick Barn.....	1	25	1,625 00	.80
Frame Residence.....	1	20	1,200 00	.60
Miscellaneous Permits.....	51		9,975 00	26.00
Total.....	60	235	\$ 40,100.00	\$ 41.05

MONTH OF MAY, 1894.

Kind of Buildings.	Number of Permits	Front Feet.	Estimated Cost	Fees.
Brick Business.....	3	51	\$ 1,500 00	\$ 1 50
Brick Residence.....	9	268	41,100 00	20 55
Brick Barn.....	3	177	15,200 00	8 00
Brick Newspaper Office.....	1	110	50,000 00	25 00
Brick Office Building.....	1	24	2,000 00	1 00
Brick Blacksmith Shop.....	1	20	400 00	.50
Frame Business.....	1	28	650 00	.50
Frame Residence.....	11	201	8,300 00	4 00
Frame Barn.....	5	102	560 00	2 50
Miscellaneous Permits.....	165		72,430 00	104 45
Total.....	200	981	\$192,040 00	\$170 00

MONTH OF JUNE, 1894.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	5	226	\$23,300.00	\$11.75
Brick Residence.....	4	108	11,300.00	5.65
Brick Barn.....	2	38	1,400.00	1.10
Brick Warehouse.....	1	185	7,000.00	3.50
Frame Business.....	1	14	300.00	.50
Frame Residence.....	9	185	11,000.00	6.65
Frame Barn.....	5	64	320.00	2.50
Frame Greenhouse.....	1	18	300.00	.50
Miscellaneous Permits.....	109		30,425.00	58.25
Total.....	137	968	\$85,345.00	\$90.40

MONTH OF JULY, 1894.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	4	146	\$27,950.00	\$14.20
Brick Residence.....	5	151	31,500.00	15.75
Brick Barn.....	1	32	1,000.00	.50
Brick Office.....	1	24	800.00	.50
Brick Warehouse.....	1	185	75,000.00	37.50
Frame Residence.....	4	192	14,300.00	7.60
Frame Barn.....	4	68	900.00	200.00
Frame Warehouse.....	1	25	100.00	.50
Frame Mattress Factory.....	1	30	1,000.00	.50
Miscellaneous Permits.....	102		22,240.00	52.25
Total.....	128	853	\$174,790.00	\$181.30

MONTH OF AUGUST, 1894.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	1	25	\$2,500.00	\$1.25
Brick Residence.....	16	432	59,950.00	30.25
Brick Coal Office.....	1	31	100.00	.50
Brick Warehouse.....	1	61	8,000.00	4.00
Frame Residence.....	11	266	15,400.00	9.15
Frame Barn.....	9	145	2,350.00	4.75
Frame Blacksmith Shop.....	1	20	300.00	.50
Frame Public School.....	1	84	2,400.00	1.20
Miscellaneous Permits.....	140		44,020.00	77.75
Total.....	181	1,064	\$135,020.00	\$129.35

MONTH OF SEPTEMBER, 1894.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	5	176	\$ 9,600.00	\$ 5.15
Brick Residence.....	11	266	50,000.00	15.10
Brick Barn.....	8	63	1,400.00	1.50
Brick Office.....	1	16	400.00	.50
Brick Hotel.....	1	37	7,500.00	3.75
Stone Church.....	1	57	6,000.00	3.00
Frame Business.....	1	18	150.00	.50
Frame Residence.....	11	219	17,300.00	9.40
Frame Barn.....	8	105	630.00	4.00
Frame Coal Office.....	1	20	300.00	.50
Frame Warehouse.....	2	64	1,500.00	1.00
Frame Blacksmith Shop.....	1	12	50.00	.50
Miscellaneous Permits.....	149		22,340.00	74.70
Total.....	195	1,053	\$97,170.00	\$119.60

MONTH OF OCTOBER, 1894.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	7	162	\$ 1,265.00	\$ 7.25
Brick Residence.....	6	161	18,400.00	9.40
Brick Barn.....	2	35	1,400.00	1.00
Brick Warehouse.....	2	145	49,500.00	24.75
Brick Coal Office.....	2	24	250.00	1.00
Brick Storage.....	1	32	750.00	.50
Brick Church.....	1	48	10,000.00	5.00
Brick Smokehouse.....	1	5	40.00	.50
Frame Business.....	3	77	2,680.00	1.85
Frame Residence.....	4	104	4,400.00	2.40
Frame Barn.....	5	64	360.00	2.50
Frame Warehouse.....	1	40	1,000.00	.50
Miscellaneous Permits.....	133		28,960.00	72.80
Total.....	164	897	\$131,190.00	\$129.45

MONTH OF NOVEMBER, 1894.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	3	95	\$ 6,450.00	\$ 3.50
Brick Residence.....	7	197	18,300.00	9.15
Brick Barn.....	1	20	500.00	.50
Brick Office.....	1	35	1,000.00	.50
Brick Carriage Works.....	1	24	400.00	.50
Brick Engine House.....	1	130	3,000.00	1.50
Frame Residence.....	3	81	9,500.00	4.75
Frame Barn.....	3	54	170.00	1.50
Frame Office.....	1	20	400.00	.50
Miscellaneous Permits.....	140		34,220.00	76.15
Total.....	161	656	\$74,240.00	\$98.55

MONTH OF DECEMBER, 1894.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	1	18	\$ 500.00	\$.50
Brick Residence.....	1	38	3,000.00	1.50
Brick Barn.....	1	22	1,500.00	.75
Brick Office.....	1	10	100.00	.50
Frame Business.....	2	49	800.00	1.00
Frame Residence.....	7	156	3,600.00	5.00
Frame Barn.....	1	16	100.00	.50
Miscellaneous Permits.....	74		27,110.00	49.05
Total.....	88	309	\$41,710.00	\$58.80

MONTH OF JANUARY, 1895.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	3	92	\$47,200.00	\$24.00
Brick Residence.....	3	66	5,000.00	2.50
Brick Barn.....	1	16	200.00	.50
Frame Residence.....	5	92	5,100.00	3.25
Frame Ice House.....	1	35	900.00	.50
Frame Marble Works.....	1	14	120.00	.50
Frame Barn.....	1	16	180.00	.50
Miscellaneous Permits.....	49		21,370.00	30.85
Total.....	64	331	\$80,070.00	\$62.60

MONTH OF FEBRUARY, 1895.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Residence.....	8	229	\$28,300.00	\$14.35
Frame Barn.....	1	15	150.00	.50
Miscellaneous Permits.....	52		13,850.00	28.50
Total.....	61	244	\$42,300.00	\$43.35

MONTH OF MARCH, 1895.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	6	194	\$ 10,200.00	\$ 5.10
Brick Residence.....	14	409	96,700.00	48.85
Brick Barn.....	2	50	4,500.00	2.50
Brick Play House.....	1	10	300.00	.50
Brick Street Car Barn.....	1	50	3,500.00	1.75
Brick Office.....	1	10	200.00	.50
Brick Brewery Depot.....	1	43	6,000.00	3.00
Frame Business.....	1	15	100.00	.50
Frame Residence.....	14	308	24,100.00	12.80
Frame Barn.....	6	97	1,030.00	3.00
Frame Warehouse.....	3	94	1,350.00	1.50
Frame Office.....	2	28	900.00	1.00
Frame Club House.....	1	51	72,000.00	26.00
Miscellaneous Permits.....	136		25,110.00	68.85
Total.....	189	1,359	\$245,990.00	\$195.35

APRIL 1ST TO NOON OF APRIL 15TH, 1895.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	3	62	\$ 4,400.00	\$ 2.50
Brick Residence.....	5	122	13,700.00	6.00
Brick Storage.....	1	25	500.00	.50
Brick Hotel.....	1	200	25,000.00	12.50
Frame Business.....	1	24	1,000.00	.50
Frame Residence.....	7	153	8,600.00	4.30
Frame Barn.....	3	56	600.00	1.50
Miscellaneous Permits.....	84		21,950.00	46.50
Total.....	105	642	\$78,730.00	\$74.30

SUMMARY FOR THE YEAR BY MONTHS.

Month.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
April 16th, noon, to April 30th, 1894.....	60	235	\$ 40,100.00	\$ 41.05
May, 1894.....	200	981	192,040.00	170.00
June, 1894.....	137	868	85,315.00	90.40
July, 1894.....	128	853	174,780.00	131.30
August, 1894.....	181	1,064	135,020.00	129.45
September, 1894.....	193	1,053	97,170.00	119.60
October, 1894.....	168	897	131,190.00	129.45
November, 1894.....	161	656	74,210.00	98.55
December, 1894.....	88	309	41,710.00	58.90
January, 1895.....	64	331	80,070.00	62.60
February, 1895.....	61	244	42,300.00	43.35
March, 1895.....	189	1,359	245,990.00	195.35
April 1st to noon April 15th, 1895.....	105	642	78,730.00	74.30
Total for year.....	1,737	9,492	\$1,414,695.00	\$1,334.10

CLASSIFIED SUMMARY.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Business.....	42	1,272	\$150,250.00	\$ 78.70
Brick Residence.....	95	2,610	380,950.00	190.20
Brick Barn.....	17	478	28,725.00	17.15
Brick Warehouse.....	5	576	139,500.00	69.75
Brick Office.....	6	119	4,500.00	3.50
Brick Newspaper Office.....	1	110	50,000.00	25.00
Brick Coal Office.....	3	55	350.00	1.50
Brick Hotel.....	2	297	32,500.00	16.25
Brick Storage.....	2	57	1,250.00	1.00
Brick Blacksmith Shop.....	1	20	400.00	.50
Brick Play House.....	1	10	300.00	.50
Brick Smoke House.....	1	5	40.00	.50
Brick Street Car Barn.....	1	50	3,500.00	1.75
Brick Carriage Works.....	1	24	400.00	.50
Brick Brewery Depot.....	1	48	6,000.00	3.00
Brick Engine House.....	1	130	3,000.00	1.50
Brick Church.....	1	48	10,000.00	5.00
Stone Church.....	1	57	6,000.00	3.00
Total for Brick Structures.....	182	5,901	\$817,665.00	\$419.30

CLASSIFIED SUMMARY, CONTINUED.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Frame Business.....	10	227	\$ 5,680.00	\$ 5.85
Frame Residence.....	91	1,977	128,200.00	71.90
Frame Barn.....	51	802	7,650.00	25.75
Frame Warehouse.....	7	223	8,950.00	3.50
Frame Office.....	3	48	1,300.00	1.50
Frame Blacksmith Shop.....	2	32	350.00	1.00
Frame Greenhouse.....	1	48	300.00	.50
Frame Mattress Factory.....	1	30	1,000.00	.50
Frame Public School.....	1	84	2,400.00	1.20
Frame Coal Office.....	1	20	300.00	.50
Frame Marble Works.....	1	14	120.00	.50
Frame Ice House.....	1	35	900.00	.50
Frame Club House.....	1	51	72,000.00	36.00
Total for Frame Structures.....	171	3,591	\$224,150.00	\$148.70

GENERAL SUMMARY.

Kind of Buildings.	Number of Permits.	Front Feet.	Estimated Cost.	Fees.
Brick Buildings.....	182	5,901	\$ 817,665.00	\$ 419.30
Frame Buildings.....	171	3,591	224,150.00	148.70
Miscellaneous Permits.....	1,384	.....	376,880.00	766.10
Grand Total for Year.....	1,737	9,492	\$1,418,695.00	\$1,334.10

LIST OF OFFICIAL NOTICES SERVED.

	No.
Buildings condemned and ordered torn down.....	84
Unsafe buildings ordered repaired.....	183
Fire escapes ordered.....	11
Gutters and downspouts ordered.....	8
Porches ordered repaired.....	6
Iron fire-proof shutters ordered.....	3
Elevator shaft ordered protected.....	4
Walks in yard ordered repaired.....	2
Stairways ordered repaired.....	2
Retaining walls ordered repaired.....	3
Chimneys ordered repaired.....	4
Sidewalk ordered repaired, where taken up to erect building.....	2
Smokestacks ordered built higher, so as to carry off smoke.....	2
Smokestacks in dangerous condition ordered torn down.....	1
Chimney in dangerous condition ordered torn down.....	1
Open cisterns ordered curbed.....	2
Cellars ordered cleaned and put in sanitary condition.....	3
Stone balustrades ordered repaired.....	2
Doors of public buildings ordered to swing out.....	4
Loose cornice on building ordered repaired.....	1
Insecure sign on building ordered made secure.....	1
Platform built in alley ordered removed.....	1
Heating apparatus in building ordered made safe.....	1
Separate water closets for female employes ordered, to comply with State law.....	1
Dressing rooms for female employees ordered, to comply with State law.....	4
Seats for female employes ordered, to comply with State law.....	1
Water for fire protection for building ordered, to comply with State law.....	1
Buildings ordered properly ventilated to comply with State law.....	13
Total number of official notices served.....	341

PAY ROLL OF DEPARTMENT FOR THE YEAR.

Months.	Amount.
April 16th to 30th, 1894.....	\$ 249.16
May 1st to 31st, 1894.....	514.33
June 1st to 30th, 1894.....	476.53
July 1st to 31st, 1894.....	476.53
August 1st to 31st, 1894.....	483.73
September 1st to 30th, 1894.....	469.33
October 1st to 31st, 1894.....	483.73
November 1st to 30th, 1894.....	476.53
December 1st to 31st, 1894.....	487.33
January 1st to 31st, 1895.....	476.53
February 1st to 28th, 1895.....	462.13
March 1st to 31st, 1895.....	476.53
April 1st to 16th, 1895.....	234.71
Total pay roll for year.....	\$ 5,767.10

SYNOPSIS OF REPORT OF FACTORY INSPECTIONS.

MADE TO THE STATE LABOR COMMISSIONER FOR THE SEMI-ANNUAL TERM
ENDING AUGUST 31st, 1894.

Specifying:	Number.
Total number of inspections made.....	170
Inspections made where no changes were ordered.....	66
Inspections made where changes were ordered.....	104
Number who have fully complied with changes ordered.....	73
Number who have partly complied with changes ordered.....	3
Number who will probably comply in the near future.....	6
Number who have not complied with orders and no excuse given for non-compliance.....	16
Number who will not comply on account of various excuses given	6
Total average number of employes found in the 170 establish- ments inspected.....	6,742
Time since inspection was begun.....	3 months
Approximate time actually employed in inspection work by one man	60 days

SYNOPSIS OF REPORT OF FACTORY INSPECTIONS.

MADE TO THE STATE LABOR COMMISSIONER FOR THE SEMI-ANNUAL TERM
ENDING FEBRUARY 28th, 1895.

Specifying:	Number.
Total number of establishments inspected.....	182
Inspections made where no changes were ordered.....	166
Inspections made where changes were ordered.....	16
Number who have complied with changes ordered.....	8
Number who will comply in the near future.....	8
Blanks returned not filled out	4
Total average number of employes found in the 182 establish- ments inspected	7,792

Respectfully submitted.

A. W. LOVE,
Superintendent of Buildings.

16

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Seventh Annual Report

of the

Board of Public Works

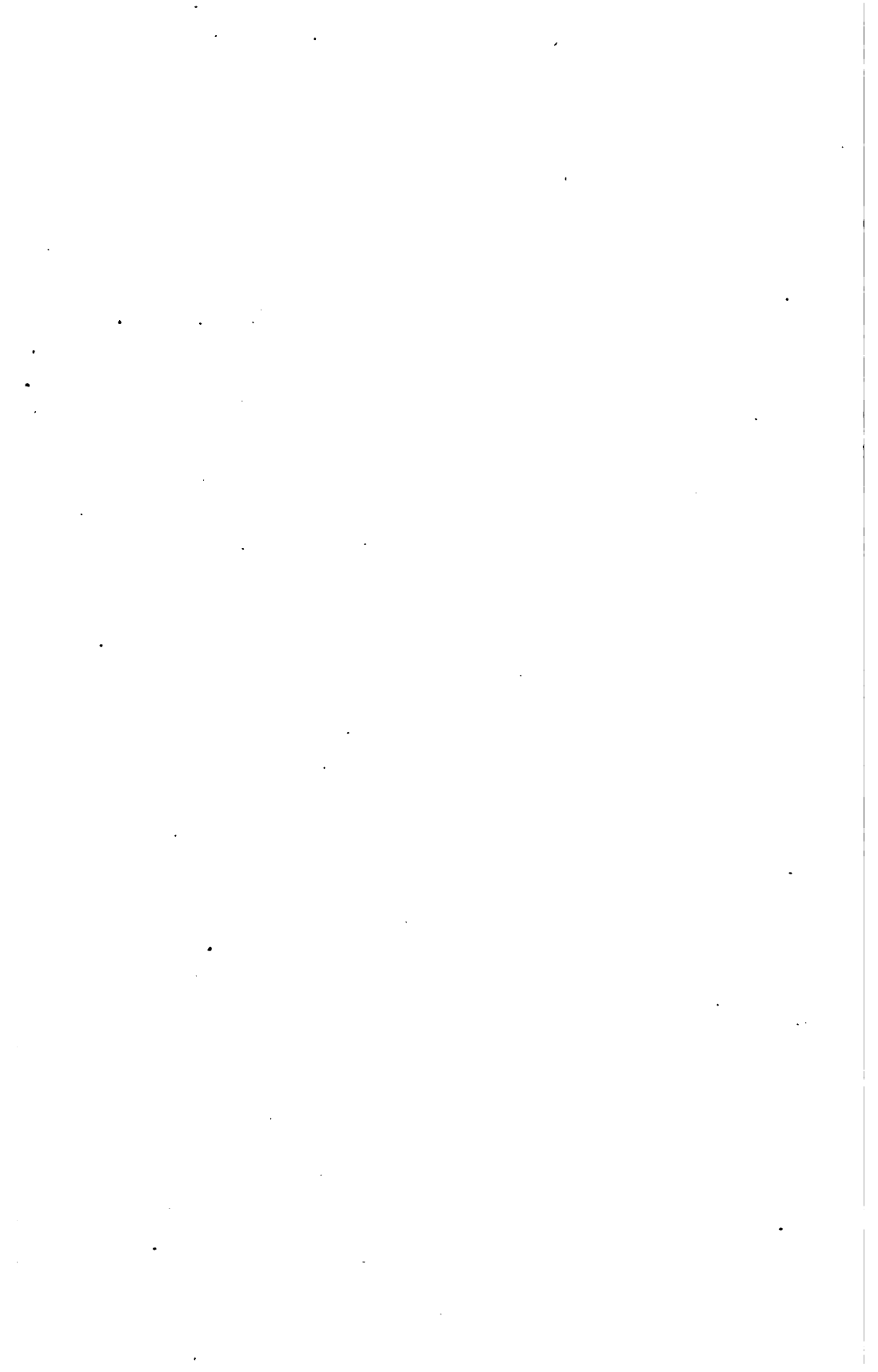


Of Kansas City, Mo.

for the

Fiscal Year 1895.

April 16, 1895, to April 20, 1896.

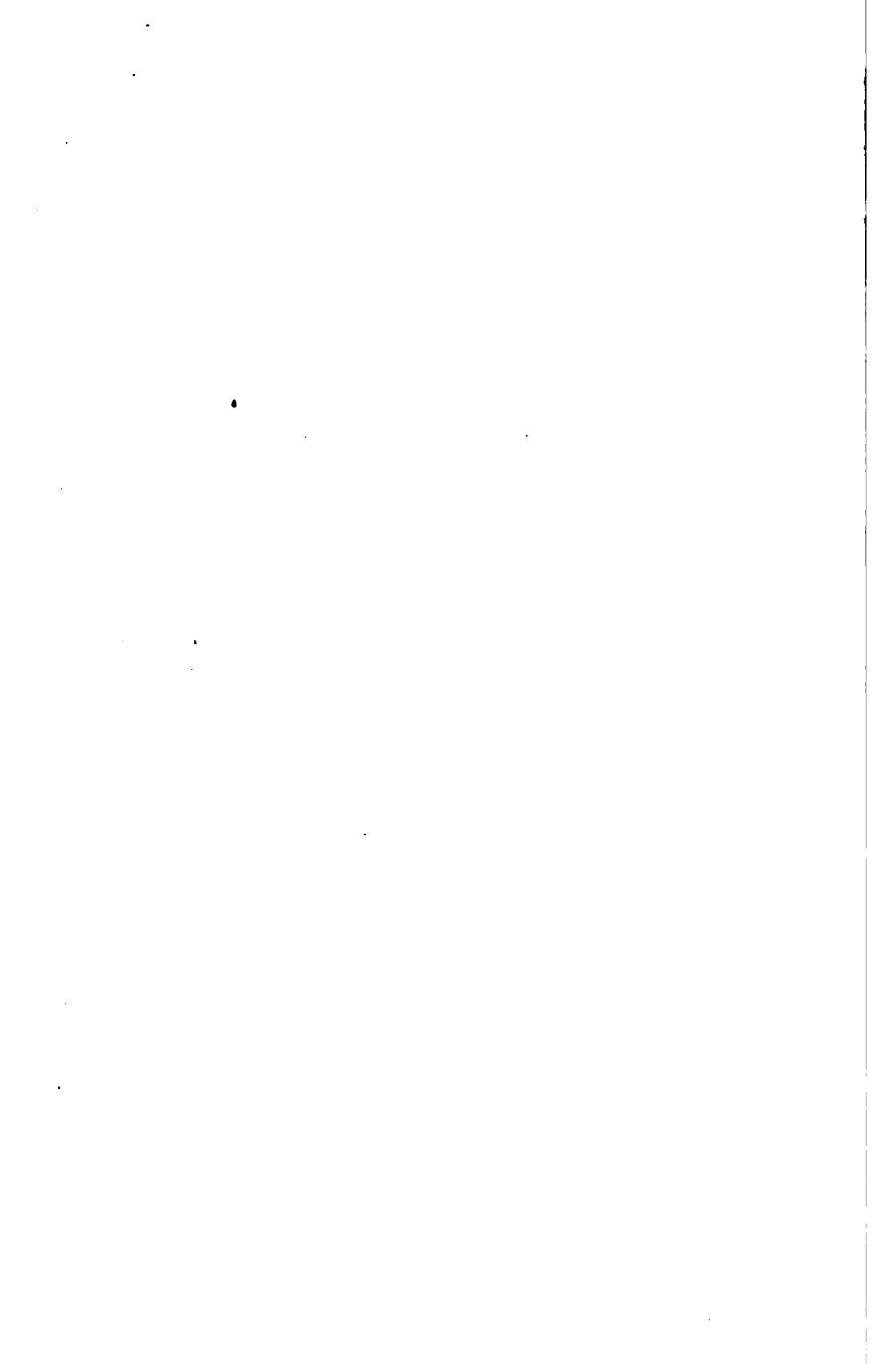


SEVENTH ANNUAL REPORT
—OF THE—
BOARD OF PUBLIC WORKS



OF KANSAS CITY, Mo.
—FOR THE—
FISCAL YEAR 1895.
April 16, 1895, to April 20, 1896.

KANSAS CITY, MO.:
LAWTON & BURNAP, PRINTERS AND STATIONERS.
1896.



BOARD OF PUBLIC WORKS.

PETER H. TIERNAN,	-	-	-	-	President.
JOHN C. GAGE,	-	-	-	-	Member.
R. S. OWEN,	-	-	-	-	Member.
GEO. J. BAER,	-	-	-	-	Member.

H. P. LANGWORTHY,	-	-	-	-	Secretary.
JOHN C. HOPE,	-	-	-	-	Clerk of Supplies.
IDA G. FIELD,	-	-	-	-	Stenographer.

DEPARTMENT OF ENGINEERING.

H. H. FILLEY,	-	-	-	-	City Engineer.
STEPHEN A. MITCHELL,	-	-	-	-	Assistant City Engineer.
JOHN M. BULLOCK,	-	-	-	-	Superintendent of Construction.
JOHN MOLONY,	-	-	-	-	Chief Clerk.
THOMAS F. CALLAHAN,	-	-	-	-	Supt. of Sidewalks and Curbing.
BENJAMIN R. WHITNEY, JR.,	-	-	-	-	Chief Draughtsman.

DEPARTMENT OF STREETS AND ALLEYS.

THOMAS A. DODDS,	-	-	-	-	Superintendent.
J. W. HUMPHREY,	-	-	-	-	Chief Clerk.

DEPARTMENT OF BUILDINGS.

A. W. LOVE,	-	-	-	-	Superintendent.
SAMUEL E. BEAR,	-	-	-	-	Clerk.

BOARD OF PUBLIC WORKS.

FISCAL YEAR 1889.

NAMES OF MEMBERS.	LENGTH OF SERVICE.
J. M. Patterson, President	June 11, 1889, to April 21, 1890.
Fred. Howard, Member	June 11, 1889, to May 2, 1890.
L. K. Thacher, "	June 11, 1889, to April 25, 1890.
Phil. E. Chappell, "	June 11, 1889, to May 2, 1890.

FISCAL YEAR 1890.

J. S. Cannon, President	April 21, 1890, to April 18, 1892.
Wm. Weston, Member	April 25, 1890, to April 27, 1891.
W. A. Kelley, "	May 2, 1890, to April 27, 1891.
J. H. Beckham, "	May 2, 1890, to April 27, 1891.

FISCAL YEAR 1891.

J. S. Cannon, President	Term expires April 18, 1892.
Jno. R. Stoller, Member	April 27, 1891, to Nov. 12, 1891.
H. C. Murphy, "	April 27, 1891, to April 18, 1892.
Chas A. Rollert, "	April 27, 1891, to April 25, 1893.
*Geo. Holmes, "	Nov. 12, 1891, to May 4, 1893.

FISCAL YEAR 1892.

Peter H. Tiernan, President	April 18, 1892—elected for 4 yrs.
Chas A. Rollert, Member	April 27, 1891, to April 25, 1893.
Geo. Holmes, "	Nov. 12, 1891, to May 4, 1893.
†John Taylor, "	April 28, 1892, to Aug. 9, 1892.
†James H. Oglebay, "	Aug. 9, 1892, to April 22, 1893.

FISCAL YEAR 1893.

Peter H. Tiernan, President	From April 18, 1892—term 4 yrs.
Arthur J. Mason, Member	April 22, 1893, to April 26, 1894.
Geo. Kumpf, "	April 25, 1893, to April 25, 1894.
*Geo. Holmes, "	May 4, 1893, to May 25, 1894.

FISCAL YEAR 1894.

Peter H. Tiernan, President	From April 18, 1892—term 4 yrs.
John C. Gage, Member	From April 25, 1894—term 2 yrs.
L. C. Slavens, "	From April 25, 1894—term 2 yrs.
L. K. Thacher, "	April 26, 1894, to Oct. 31, 1894.
§R. S. Owen, "	Nov. 30, 1894, to April 21, 1896.

FISCAL YEAR 1895.

Peter H. Tiernan, President	April 18, 1892, to April 20, 1896.
John C. Gage, Member	April 25, 1894, to April 21, 1896.
L. C. Slavens, "	April 25, 1894, to Dec. 4, 1895.
R. S. Owen, "	Nov. 30, 1894, to April 21, 1896.
**Geo. J. Baer, "	Dec. 4, 1895, to April 21, 1896.

*Geo. Holmes, appointed, vice Jno. R. Stoller, resigned.

†John Taylor, appointed, vice H. C. Murphy, resigned.

‡James H. Oglebay, appointed, vice John Taylor, resigned.

§Geo. Holmes, re appointed.

§R. S. Owen, appointed, vice L. K. Thacher, deceased.

**Geo. J. Baer, vice L. C. Slavens.

REPORT OF THE BOARD OF PUBLIC WORKS

OF KANSAS CITY, MISSOURI,

FOR THE FISCAL YEAR ENDING APRIL 20, 1896.

To the Honorable Common Council, Kansas City, Mo.:

GENTLEMEN — The Board of Public Works herewith respectfully submits its annual report for the fiscal year 1895 (from April 15th, 1895, to April 20th, 1896).

The apportionment for the year was \$160,000.00, the unexpended appropriations brought over from the last fiscal year (1894) amounted to \$2,615.73, and \$1,237.38 rent was received for use of the Steam Road Rollers, making a total of \$163,853.11; \$2,000 was appropriated by the Common Council for charitable purposes, \$3,359.71 was transferred to the Expense Department by the City Comptroller, \$6,127.75 was taken from the Department for use in the General Fund, and of the apportionment \$5,978.36 remained uncollected, leaving a total of \$146,387.29 to be accounted for by the Board.

The total receipts and disbursements for the fiscal year were as follows :

RECEIPTS.

Apportionment by the Common Council	\$160,000.00
Unexpended appropriations from fiscal year 1894	2,615.73
Steam Road Rollers, rent from	1,237.38

	\$163,853.11

CONTRA.

Appropriation to charity, Ord. No. 1131	\$2,000.00
Amt transferred to Expense Dept. by City Comptroller	3,359.71
Amount transferred to General Fund	6,127.75
Amount of apportionment uncollected	5,978.36

	17,465.82
To be accounted for	\$146,387.29

DISBURSEMENTS.

Department Expenses.	{ Board of Public Works.....	\$ 9,868.50	
	{ Engineering Department.....	47,575.30	
	{ Street and Alley Department.....	81,529.69	
	{ Building Department.....	6,921.45	
			\$145,894.94
Appropriations, Expenditures on account of.....			128 75
" Unexpended, Cash in City Treasury...			363 60
Total.....			\$146,387.29

As heretofore stated, the sum of \$1,237 38 was received from contractors for rental of the Steam Road Rollers, while the expenses of the Rollers for salaries, coal and repairs, amounted to \$2,458.96, an excess in expense of \$1,221.58.

During the year a new 18-ton Roller was leased from the O. S. Kelly Company, of Springfield, Ohio, and later arrangements were made for the purchase of the Roller.

The following table shows the expenses of the several departments of the Board of Public Works, and the fund at its disposal, to be accounted for each year since its organization :

EXPENDITURES OF THE BOARD OF PUBLIC WORKS DEPARTMENT SINCE ORGANIZED.

Fiscal year ending in April.	Board of Public Works.	Engineering department.	Street and Alley department.	Building department.	Total.	Funds at disposal of Board and to be accounted for
1890.....	\$ 6,658.73	\$ 71,861.86	\$ 83,392.28	\$17,368.37	\$179,242.74	\$269,814.57
1891.....	14,597.75	70,957.86	95,316.44	12,723.71	193,595.76	268 417.95
1892.....	10,947.76	56,354.03	86,409.76	7,871.47	161,583.02	225,982.03
1893.....	9,274.29	57,854.11	80,507.38	7,382.81	155,022.13	177,090.74
1894.....	24,583.13	49,495.91	67,746.25	6,551.32	148,376.61	181,499.61
1895.....	9,857.67	43,059.70	79,219.15	5,799.57	137,936.09	148,848.17
1896.....	9,868.50	49,575.30	81,529.69	6,921.45	145,894.94	146,387.29
Totals.....	\$85,787.77	\$397,164.27	\$574,120.95	\$64,618.20	\$1,121,691.19	\$1,415,940.86

PUBLIC IMPROVEMENTS.

Table "A" gives in detail the total amount of public work constructed through the Engineering Department, and the total expenses of that department since the organization of the Board of Public Works.

TABLE "A."

Fiscal Year Ending April.	Grading Streets and Alleys.	Curbing	Paving Streets and Alleys.	Sidewalks, Plank.	Sidewalks, First Class.	Sidewalk Repairs.	Bridges and Viaducts.	Sewers, District.	Sewers, Public.	Sewers, O. K. Creek.	Sprinkling and Cleaning.	Miscellaneous Public Work.	Total Amount of Work.	Expenses of Engineering Department.
1890.....	\$140,731.71	\$73,412.44	\$373,702.34	\$9,714.33	\$23,070.47	\$6,933.57	\$37,946.00	\$140,437.27	\$7,853.20	\$84,911.44	\$1,394.98	\$6,282.12	\$903,359.58	\$71,853.24
1891.....	59,767.70	20,271.49	144,104.43	56,231.64	22,094.81	6,993.57	6,213.57	79,730.20	12,699.50	2,215.54	573,304.75	2,215.54	573,304.75	70,377.86
1892.....	59,900.36	27,103.42	238,072.96	13,563.83	32,243.31	8,741.43	3,516.00	29,733.38	15,418.36	51,523.12	2,326.72	1,525.98	453,194.15	56,334.03
1893.....	11,963.63	33,064.19	233,721.11	8,313.94	27,293.33	8,212.43	15,300.00	43,632.00	12,103.19	41,858.77	2,354.18	2,001.79	391,207.30	57,333.03
1894.....	42,307.29	36,094.03	330,170.21	8,313.94	29,682.68	13,216.05	15,300.00	43,632.00	1,724.19	41,858.77	25,523.63	3,001.79	8,1199.76	49,095.91
1895.....	12,825.36	11,438.33	416,771.37	3,528.13	20,897.27	7,441.27	.....	81,834.41	4,999.90	.....	44,715.00	3,583.70	597,681.65	43,033.70
1896.....	23,631.44	13,338.33	413,620.38	3,093.72	4,634.99	16,738.61	.....	4,631.91	.....	.....	19,380.83	77.56	570,830.84	47,575.30
Totals.....	\$315,873.19	\$227,306.75	\$2,363,777.27	\$132,746.60	\$283,333.18	\$63,214.45	\$63,085.57	\$404,826.96	\$48,180.61	\$215,388.05	\$93,795.96	\$16,038.96	\$1,229,590.47	\$397,164.27

The work completed during the fiscal year through the Engineering Department cost \$570,830.84, and the expense of the department for all purposes was \$47,575.30. The cost of public work during the previous fiscal year (1894) was \$597,681.69, and the expense of the department was \$43,059.70.

The paving and repaving of Streets and Alleys cost \$445,620.33 (\$5,686.03 for Alleys).

The mileage and cost of each kind of pavement is as follows :

Materials.	Lineal Feet.	Miles.	Square Yards.	Cost	Av'g Cost per Sq. Yd.
Asphalt—Trinidad	34,717.75	6.57	129,612.78	\$329,791.36	\$2.544
Brick	10,157.70	1.94	33,486.40	48,719.25	1.307
Macadam	12,268.99	2.32	55,739.30	49,814.42	.894
Stone Blocks	1,487.70	0.28	6,845.00	9,635.83	1.40
Cedar Blocks	600.50	0.11	1,762.00	1,973.44	1.12
Totals	59,232.64	11.21	227,485.38	\$439,934.30	

The following tables show the mileage and cost of all street paving work constructed from 1889 to 1895, inclusive, and kinds of material used.

COMMENCING JANUARY 1, 1889, ENDING MAY 9, 1889.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sqr. Yd.
Asphalt	2,570.00	0.486	7,645.63	\$21,407.76	\$2.80
Macadam	1,027.00	.194	4,098.70	2,746.18	.67
Totals	3,597.00	0.680	11,744.33	\$24,153.89	

COMMENCING MAY 9, 1889, AND ENDING APRIL 30, 1890.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt	10,761.30	2.01	40,244.27	\$112,683.96	\$2.80
Cedar Blocks	37,674.97	7.135	146,772.14	248,807.08	1.421
Granite Blocks	1,173.00	.222	5,079.57	16,527.42	3.253
Brick	3,525.00	.667	13,256.72	27,056.36	2.041
Totals	53,135.27	10.064	205,352.70	\$364,874.82	

COMMENCING APRIL 30, 1890, AND ENDING APRIL 20, 1891.

Material Used	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt	4,753.00	0.90	17,690.60	\$ 48,890.92	\$2.765
Cedar Blocks	14,901.70	2.82	50,394.60	71,160.78	1.412
Macadam	516.00	.10	2,765.00	1,161.30	.42
Stone Blocks	2,655.80	.50	7,915.80	23,074.89	2.915
Total	22,855.50	4.32	78,756.00	\$144,287.89	

DURING FISCAL YEAR COMMENCING APRIL 20, 1891, AND
ENDING APRIL 18, 1892.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt	15,176.00	2.86	57,110.89	\$144,398.71	\$2.528
Brick	6,682.50	1.27	21,079.80	40,390.62	1.677
Macadam	8,825.80	1.67	31,253.50	32,838.91	.958
Stone Blocks	771.30	.14	3,054.70	7,838.91	2.573
Cedar Blocks	1,334.20	.26	4,572.90	6,767.89	1.48
Totals	32,742.80	6.20	123,071.79	\$232,157.04	

DURING FISCAL YEAR ENDING APRIL 17, 1893.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Brick	9,534.95	1.80	31,829.30	\$ 57,557.74	\$1.619
Asphalt	12,391.15	2.35	48,163.90	121,117.04	2.576
Macadam	14,618.06	2.62	50,207.70	37,510.66	.747
Totals	36,572.16	6.77	130,200.90	\$219,185.24	

DURING FISCAL YEAR ENDING APRIL 16, 1894.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt	29,098.10	5.51	99,413.30	\$257,089.35	\$2.593
Macadam	18,958.15	3.59	74,001.60	63,915.47	.864
Vitrified Brick	32,116.10	6.08	118,962.60	195,181.95	1.617
Stone Blocks, repairs	2,230.00	.42	9,937.50	6,265.88	.63
Totals	82,412.35	15.60	302,315.20	\$522,493.65	

DURING FISCAL YEAR ENDING APRIL 15, 1895.

Material.	Lineal Feet.	Miles.	Square Yards.	Cost.	Av'g Cost per Sq. Yd.
Asphalt—Trinidad Lake.....	27,221.70	5.16	118,460.26	\$308,754.62	\$2.64
Macadam.....	6,837.60	1.29	21,772.00	19,587.02	.899
Granite Blocks.....	329.50	0.06	1,238.80	3,177.84	2.47
Brick, Vitrified.....	13,131.40	2.49	45,977.80	61,914.79	1.316
Cedar Blocks, repave.....	2,068.15	0.39	8,481.60	9,689.93	1.05
Totals.....	49,588.35	9.39	195,930.46	\$403,021.20	

The aggregate mileage of paved streets is as follows :

Material.	Total Miles.	Increase during year. Miles.	Decrease during year. Miles.
Cedar Blocks	28.52	.....	8.52
Asphalt.....	27.46	6.57	Taken up and replaced with other kinds of pavement.
Brick.....	14.61	1.92	
Macadam.....	12.77	2.33	
Stone Blocks	2.25	.11	
Totals.....	85.63	10.92	

At the close of the fiscal year, the public work contemplated by Ordinance and under contract, amounted to \$235,629.16 as follows :

CONTEMPLATED BY ORDINANCE.

Paving 7 1/2 miles.	{ Asphalt, 2 streets, Approximate cost, \$17,237.15	
	{ Brick, 6 streets, " " 25,098.92	
	{ Macadam, 9 streets, " " 91,049.13	
		\$133,385.20
Sidewalks.	{ Plank, Approximate cost \$1,317.32	
	{ 1st Class, " " 2,473.87	
		3,791.19
Curbing.....	" "	12,184.31
Planting trees.....	" "	150.00

UNDER CONTRACT.

Grading { Streets,....	Approximate cost	\$1,639.63	
{ Alleys,	" "	323.75	
			1,963.38
Sewers. { Public,	" "	\$16,919.70	
{ District,....	" "	67,253.88	
			84,155.08
Total			\$235,629.16

A very large increase over the public work under contract at the close of the fiscal year 1894.

The accompanying reports of the City Engineer, Superintendent of Streets and Superintendent of Buildings, are complete in detail and in summary, and many of the suggestions and recommendations set forth are entitled to and should receive careful consideration.

LIGHTING STREETS.

At the close of the fiscal year there were 1,691 gas lights, 1,140 gasoline lights and 143 electric lights in service, there being no change in the number of lights during the year.

The City paid \$17.50 each for gas lights (moonlight schedule), \$19.00 each for gasoline lights (full moonlight schedule), and \$119.50 each for electric (arc) lights (all night schedule), and the total cost of street lighting for the year was \$64,574.83 after certain deductions were made to bring the total cost within the apportionment of \$65,000.00.

Kansas City Gas Light and Coke Company.....	\$24,611.62
F. K. Hoover, Gasoline Lights.....	21,078.72
Kansas City Electric Light Company	18,904.49
Total.....	\$64,574.83

Cost of Street Lighting, fiscal year 1893.....	\$68,929 10
*Cost of Street Lighting, fiscal year, 1894	58,428.01

*Certain deductions made to bring the cost within the apportionment for the year.

WATER WORKS.

Possession of the property of the National Water Works Company was delivered to the City August 24th, 1895, as per document filed with the Board of Public Works, as follows :

SATURDAY, AUGUST 24, 1895.

Possession of all the property of the National Water Works Company described in the decree of the United States Circuit Court for the Western Division of the Western District of Missouri, of date November 28, 1894, is hereby delivered by said Company to the City of Kansas City, Missouri, and all officers, agents,

servants, and employees of said National Water Works Company will govern themselves accordingly.

This August 24, 1895.

NATIONAL WATER WORKS CO.,

By GARDINER LATHROP and

L. C. KRAUTHOFF,

Its Counsel.

Possession accepted subject to terms of decree of said Court, this August 24th, 1895.

WEBSTER DAVIS,

Mayor of Kansas City, Mo.

Actual possession of the property of the National Water Works Company was not taken until September 1st, 1895, the interim being occupied in checking up the books and accounts, and taking an inventory of the property, machinery, supplies, etc., of the Company that was to be turned over to the City.

For the balance of the fiscal year, viz., from September 1st, 1895, to April 20th, 1896 ($7\frac{2}{3}$ months), the City received, after deducting \$1,108.15 for money rebated and refunded, an income of \$266,940.39 from all sources. There was appropriated by the Common Council \$11,427.11 for the extension of water mains and betterment of the service; the City Comptroller paid \$69,750.00 first semi-annual interest on \$3,100,000 Water Works Bonds and \$2,406.14 for taxes, and placed \$40,000.00 in the sinking fund; and it cost \$75,531.48 to run the plant, leaving a cash balance in the hands of the City Treasurer of \$67,825.66 at the close of the year.

The total receipts and disbursements of the Water Works Department for the last $7\frac{2}{3}$ months of the fiscal year 1895 were as follows:—

RECEIPTS.

From Water Rates.....	\$ 95,605.11
" Meter Rates.....	119,301.60
" Building Permits.....	2,574.65
" Special Permits.....	1,163.82
" Deposits.....	6,422.65
" Corporation Cocks.....	548.35
" Meters Set.....	1,206.72
" Meters Repaired.....	573.78
" Meters Sold.....	1,131.00
" Fines.....	421.00
" Miscellaneous.....	1,193.57
" Metropolitan Water Works Co.....	11,647.90
" National Water Works Co.....	25,340.32
" Interest and Miscellaneous.....	868.07
	<hr/>
	\$268,048.54
CONTRA.	
Rebates and money refunded.....	1,108.15
Total.....	<hr/>
	\$266,940.39

DISBURSEMENTS.

Superintendent and Engineer, office expenses.....	\$ 4,055.63
Street Department.....	8,425.53
Inspection Department.....	5,251.53
Meter Department.....	8,022.33
Betterment of Plant.....	4,914.64
Turkey Creek Pumping Station.....	21,049.79
Quindaro Pumping Station.....	15,864.65
Miscellaneous expenses.....	1,046.69
Assessor and Collector of Water Rates.....	6,340.69
Total running expenses.....	<hr/>
	\$ 75,531.48
Appropriations for Extension of Water Mains.....	\$ 11,427.11
Taxes.....	2,406.14
Interest on Bonds (1st semi-annual).....	69,750.00
Sinking Fund.....	40,000.00
Total.....	<hr/>
	\$189,114.73
Cash Balance in City Treasury.....	67,825.66
Total.....	<hr/>
	\$266,940.39

THE BOARD OF PUBLIC WORKS.

PETER H. TIERNAN, *President.*

JOHN C. GAGE,	} <i>Members.</i>
R. S. OWEN,	
GEO. J. BAER,	

April 20th, 1896.

STATEMENT OF BOARD OF PUBLIC WORKS FUND.

FOR THE FISCAL YEAR ENDING APRIL 20, 1896.

Apportionment for the fiscal year 1895..	\$160,000.00
Appropriations (unexpended) from last fiscal year.....	2,615.73
Steam road rollers, rent from.....	1,237.38
Total.....	<u>\$163,853.11</u>

CONTRA.

Appropriation to charity, Ord. No. 1131..	\$ 2,000.00
Amount transferred to expense dept. by City Comptroller.....	3 359.71
Amount transferred to general fund.....	6,127.75
Apportionment, amount uncollected.....	5,978.36
Total.....	<u>\$ 17,465.82</u>
Balance to be accounted for	<u>\$146,387.29</u>

EXPENSES—BOARD OF PUBLIC WORKS.

Pay rolls—members and clerks.....	\$ 6,327.09
Miscellaneous expenses.....	230.88
Steam road rollers, pay rolls, repairs, coal, &c.....	2,459.96
Condemnations, expenses for abstracts &c	843.36
Printing and stationery expenses.....	8.21
Total	<u>\$ 9,868.50</u>
	<u>\$ 9,868.50</u>

ENGINEERING DEPARTMENT.

Pay rolls—Engineer and ass't engineer..	\$ 5,018.76
“ Clerical department.....	7,001.26
“ Draughting “	5,283.26
“ Transitmen, rodmen and chain- men.....	9,395.98
“ Supt. of Construction and In- spectors.....	10,893.50
“ Inspector of grading	912.50
“ Sidewalk and curbing dep't..	5,277.50
“ Inspector of excavations.....	912.50
	<u>\$ 44,695.26</u>
Horse hire, expense.....	\$ 1,277.51
Miscellaneous.....	1,045.83
Abstract work, grading cases and general information	551.57
Printing and stationery expense.....	5.13
	<u>\$ 2,890.04</u>
Total.....	<u>\$ 47,575.30</u>

STREET AND ALLEY DEPARTMENT.

Pay rolls—Superintendent.....	\$ 2,027.42	
“ Clerks	1,783.00	
“ Inspectors	3,060.00	
“ Foremen.....	2,914.54	
“ Carpenters.....	1,603.98	
“ Pavers	615.45	
“ Masons	2,215.50	
“ Teams	20,792.18	
“ Laborers.....	33,828.77	
	<u>\$ 68,840.84</u>	
Horse hire and keeping, expense of.....	\$ 889.85	
Repairs of machinery, tools, &c.....	795.84	
Fountain repairs.....	93.72	
Material for cross-walks, bridges, and viaducts, repairs of.....	3,462.62	
Material for street repairs.....	1,543.18	
Material for sewer repairs ..	3,943.33	
Street sprinkling, paid for.....	788.00	
Tools, implements, &c.....	1,076.31	
Miscellaneous expenses.....	96.00	
	<u>\$ 12,688.85</u>	
Total		\$ 81,529.69

BUILDING DEPARTMENT.

Pay rolls—Superintendent.....	\$ 2,500.00	
“ Clerk.....	972.00	
“ Inspectors	3,442.95	
	<u>\$ 6,914.95</u>	
Office expenses.....	\$ 6.50	6.50
		<u>\$ 6,921.45</u>
Department expenses total.....		\$145,894.94

APPROPRIATIONS, (CONDEMNATION).

Ord. No. 4972, balance of damages and settlement of benefits under Ordinance No. 4972, entitled, “An Ordinance to open and establish a Boulevard along parts of Independence Avenue, Gladstone Avenue, St. John Avenue, Scarritt Avenue and other streets.”.....	\$ 128.75	128.75
Total expenditures from Board of Public Works fund.....		\$146,023.69
Appropriations (unexpended) forward to fiscal year 1896.....		363.00
Total.....		<u>\$146,387.29</u>

Respectfully submitted,

H. P. LANGWORTHY, *Secretary.*

FISCAL YEAR 1895. BOARD OF PUBLIC WORKS DEPARTMENT.

DISBURSEMENTS.

Month, 1895.	Board of Public Works.	Engineering Department.	Street and Alley Department.	Building Department.	Total Expenses.	Appropriations and Condemnations.	Disbursements.
April 15-30.....	\$ 403.00	\$ 1,839.06	\$ 4,978.72	\$ 289.17	\$ 6,929.95	.....	\$ 6,929.95
May.....	665.85	3,764.12	7,002.72	580.93	12,013.62	.....	12,013.62
June.....	810.69	3,509.92	6,634.55	516.53	11,525.69	.....	11,525.69
July.....	807.14	4,212.17	9,386.44	580.93	14,986.68	.....	14,986.68
August.....	724.29	3,751.34	7,550.65	580.93	12,407.21	.....	12,407.21
September.....	903.51	4,170.08	8,502.37	568.33	14,144.24	.....	14,144.24
October.....	832.74	4,065.65	8,587.89	580.93	14,087.21	.....	14,087.21
November.....	989.81	3,914.70	6,805.43	570.13	12,310.07	.....	12,310.07
December.....	878.96	4,215.01	6,118.75	570.13	11,812.85	.....	11,812.85
1896.							
January.....	820.73	3,729.45	7,809.53	586.93	12,446.63	.....	12,446.63
February.....	816.42	3,900.90	3,941.82	559.33	9,118.47	.....	9,118.47
March.....	735.90	4,046.61	4,141.47	562.93	9,489.91	.....	9,489.91
April 1-20.....	479.47	2,486.34	1,832.35	324.25	4,622.41	\$ 138.75	4,751.16
Totals.....	\$9,868.50	\$47,575.80	\$81,529.69	\$6,921.45	\$145,894.94	\$ 138.75	\$146,023.69
Appropriations (unexpended) forward to fiscal year 1896.....							\$ 368.60
Total.....							\$146,392.29

FISCAL YEAR, 1895. BOARD OF PUBLIC WORKS.

DISBURSEMENTS.

Month, 1895.	Pay Rolls.	Miscellan- eous Expenses.	Steam Rollers.	Abstracts. Condem- nations.	Printing and Stationery.	Totals.
April 16-30	\$ 256.24	.....	\$ 66.55	\$ 72.00	\$8.21	\$ 403.00
May	512.50	\$ 6.40	146.95	.....	.....	665.85
June	512.50	164.50	123.69	10.00	.....	810.69
July	512.50	2.10	157.79	184.75	.....	857.14
August	512.50	8.68	124.61	78.50	.....	724.29
September	512.50	25.25	201.51	164.75	.....	903.51
October	512.50	10.00	243.24	65.00	.....	832.74
November	512.50	1.00	332.31	144.00	.....	989.81
December	512.50	2.80	363.66	.....	.....	878.96
1896.						
January	837.50	4.00	195.22	84.00	.....	820.72
February	537.50	6.15	237.77	35.00	.....	816.42
March	537.50	.....	142.54	55.86	.....	785.90
April 1-20	358.35	.....	121.12	.....	.....	479.47
Totals	\$6,327.09	\$ 230.88	\$2,458.96	\$943.36	\$8.21	\$9,868.50

FISCAL YEAR, 1895. BOARD OF PUBLIC WORKS.

MISCELLANEOUS EXPENSE.

Month, 1895.	Office Supplies. Repairs.	Telephone Rental.	Garbage, Carts and Barrels.	Boarding up Old House.	Totals.
April 16-30 .....	.....	.....	.....	.....	.....
May	\$ 6.40	.....	.....	.....	\$ 6.40
June .....	.90	\$18.00	\$ 145.60	.....	164.50
July	2.10	.....	.....	.....	2.10
August	1.30	.....	.....	67.34	8.64
September	7.25	18.00	.....	.....	25.25
October	10.00	.....	.....	.....	10.00
November	1.00	.....	.....	.....	1.00
December	2.80	.....	.....	.....	2.80
1896.					
January	4.00	.....	.....	.....	4.00
February	6.15	.....	.....	.....	6.15
March .....	.....	.....	.....	.....	.....
April 1-20 .....	.....	.....	.....	.....	.....
Totals	\$ 41.90	\$36.00	\$ 145.60	67.34	\$230.84

FISCAL YEAR, 1895. ENGINEERING DEPARTMENT.
DISBURSEMENTS.

Month, 1895.	Pay Rolls.	Horse Hire.	Miscellane- ous Expenses.	Abstracts, Grading, etc.	Printing and Stationery.	Totals.
April 16-30	\$ 1,773.37	\$ 54.26	\$ 21.80	\$ 4.50	\$5.13	\$ 1,859.06
May	3,406.50	105.00	252.62	.....	.....	3,764.12
June	3,844.77	105.00	53.15	7.00	.....	3,509.92
July	3,713.10	105.00	312.82	81.25	.....	4,212.17
August	3,450.80	105.00	146.29	49.75	.....	3,751.34
September	3,884.63	105.00	37.15	143.25	.....	4,170.03
October	3,930.30	105.00	11.35	39.00	.....	4,085.65
November	3,798.90	105.00	36.55	4.25	.....	3,944.70
December	3,937.50	105.00	57.26	115.25	.....	4,215.01
1896.						
January	3,540.00	105.00	34.95	49.50	.....	3,729.45
February	3,671.90	105.00	24.00	.....	.....	3,800.90
March	3,825.90	105.00	57.89	57.82	.....	4,046.61
April 1-20	2,418.09	68.25	.....	.....	.....	2,486.34
Totals	\$44,695.26	\$1,277.51	\$1,045.83	\$351.57	\$5.13	\$47,575.30

FISCAL YEAR, 1895. ENGINEERING DEPARTMENT.

MISCELLANEOUS EXPENSE.

Month. 1895.	Office Supplies. Repairs.	Blue Prints.	Tools, Instru- ments Repairs.	Testing Brick. Rattler.	Wash Row and Slab.	Window Engineer to Chief Clerk.	Office Furniture, Cases, &c.	Stakes, Nails, &c.	Rubber Boots and Coats.	Brick Testing Machine.	Total.
April 16-30	\$ 85		\$ 4 50	\$ 2 10	\$14 85						\$ 21 80
May.....	5 30	\$ 8 00	239 07	5 25							252 62
June.....	112 11		49 25	3 70							53 15
July.....	2 10	12 27	23 44			\$15 00	\$150 00				\$12 82
August.....		7 54	3 15	12 25			107 00	\$ 14 25			146 29
September.....		5 51	3 09				8 80	24 75			\$7 15
October.....	11 85										11 85
November.....	2 70		5 60	3 50				24 75			36 55
December.....	3 85	6 66	1 30	7 85				18 70	\$19 40		57 26
1896.											
January.....	2 35	13 78	1 00							\$17 82	24 95
February.....	6 00		5 00					18 50		10 00	24 00
March.....	2 90	25 28	7 71	3 50							57 89
April 1-20											
Totals	\$ 149 21	\$74 04	\$346 11	\$37 45	\$14 85	\$15 00	\$260 80	\$100 95	\$19 40	\$27 92	\$1,045 83

FISCAL YEAR 1895. STREET AND ALLEY DEPARTMENT.

DISBURSEMENTS.

Month, 1895.	Pay Rolls.	Horses and Keep.	Repairs, General.	Fountain Repairs.	Cross Walks and Bridges.	Streets, Repairs.	Streets, Sprinkling	Sewers, Repairs.	Tools, Etc.	Miscella- neous Expense.	Total.
April 16-30	\$ 3 267.71	\$ 41.00	\$101.80	\$12.85	\$ 293.50	\$ 240.00	\$270.00	\$ 46.36	\$ 105.50	.....	\$ 4 378.72
May	5 757.47	78.00	147.50	4.90	511.90	22.40	432.00	35.90	12.65	.....	7 002.72
June	5 876.40	74.00	118.00	4.63	.....	148.43	22.00	284.61	97.45	\$18.00	6 638.55
July	8 333.57	91.50	180.85	29.13	270.00	3.08	22.00	437.08	39.28	.....	9 386.44
August	6 138.80	76.00	17.25	1.94	230.22	68.00	22.00	151.42	650.60	.....	7 300.65
September	7 373.08	82.60	42.40	10.23	484.43	174.96	20.00	286.27	5.40	18.00	8 502.37
October	7 635.89	51.50	29.50	10.55	704.45	171.48	.....	144.92	10.10	.....	8 567.89
November	5 022.59	76.50	16.10	4.96	484.10	384.68	.....	730.46	4.00	60.00	6 805.43
December	5 394.18	82.25	74.63	5.89	27.00	38.40	.....	412.12	114.28	.....	6 148.75
1896											
January	6 204.76	78.00	42.46	5.65	884.70	149.00	.....	472.84	22.40	.....	7 309.53
February	3 222.74	62.50	21.55	2.83	322.32	79.75	.....	483.36	15.25	.....	3 911.82
March	3 496.80	66.00	6.60	.80	270.00	66.00	.....	436.47	.....	.....	4 144.47
April 1-20	1,352.35	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,352.35
Totals	\$63,840.84	\$889.85	\$795.84	\$98.72	\$8,462.62	\$1,543.18	\$768.00	\$3,943.88	\$1,076.81	\$96.00	\$81,329.69

FISCAL YEAR 1895. BUILDING DEPARTMENT.
DISBURSEMENTS.

Month. 1895	Pay Rolls.	Office Expenses.	Totals.
April 16-30	\$ 284 67	\$.50	\$ 285 17
May.....	540 93		540 93
June.....	566 53		566 53
July.....	540 93		540 93
August.....	540 93		540 93
September.....	563 34		563 33
October.....	580 93		580 93
November.....	570 18		570 18
December.....	570 13		570 13
1896			
January.....	580 93	6 00	586 93
February.....	559 33		559 33
March.....	562 93		562 93
April 1-20	324 25		324 25
Totals	\$6,914.95	\$6.50	\$6,921.45

STATEMENT OF SPECIAL APPROPRIATIONS FOR THE FISCAL YEAR 1895.

No. Ord.	CONTRACTS.	Appropriations and Balances.	Amount Expended.	Amount Charged Back.	Balance Unexpended.
5680	Street Signs, to purchase	\$ 323.80		\$ 373.80	
5713	Smoke Devices, to purchase for abatement of smoke.....	1,199.70		1,199.70	
5761	City Hall, to fresco walls, ceilings, etc.....	384.65		384.65	
	Footings.....	\$1,908.15		\$1,908.15	
	CONDEMNATIONS.				
2400	Extend and establish College Ave., Bernard Place to 15th St.....	\$ 46.12		\$ 46.12	
2472	Open and establish Liberty St., Turner & Co.'s Addition to 12th St.....	37.72		37.72	
3495	Open and establish 23rd St., Charlotte St. to Grand Ave.....	78.94		78.94	
3902	Confirm verdict 23rd St., Charlotte St. to Grand Ave.....	2.00		2.00	
3940	Open and establish Main St., 21th St. to Grand Ave.....	69.60		69.60	
4181	Confirm verdict Main St., 24th St. to Grand Ave.....	2.00		2.00	
3732	Open and establish 23rd St., Fairmount Park Addition to Madison Ave.....	5.80		5.80	
4063	Confirm verdict 23rd St., Fairmount Park Addition to Madison Ave.....	1.00		1.00	
3857	Open and establish 33rd St., Terrace Place to W. & C. Subdivision.....	45.00		45.00	
4246	Open and establish Morrill Ave., Smart Ave. to Scarritt Ave.....	34.40		34.40	
5071	Open and establish Lombard St., Bell St. to State Line.....	36.00		36.00	
4972	Confirm verdict Lombard St., Bell St. to State Line.....	3.35	\$128.75	3.35	\$219.25
5172	Open and establish a Boulevard along Independence avenue* and other streets.....	348.00			
5725	Confirm verdict Wyandotte St., Milwaukee Ave. to 33rd St.....	1.00		1.00	
5233	Confirm verdict No. 4223, open and establish 43th St., Grand Ave. to Broadway.....	.75		.75	
5372	Confirm verdict No. 5285, widen and establish 24th St., Holly St. to S. W. Boulevard.....	1.00		1.00	
5385	Confirm verdict No. 5327, open and establish Annie St., Downing's Resvy Longview to Prospect.....	1.00		1.00	
5931	Open and establish 11th St., South Winfield Place to Agnes Ave.....	1.00		1.00	
	Amount forward.....	\$ 705.58	\$128.75	\$ 857.58	\$219.25

STATEMENT OF SPECIAL APPROPRIATIONS FOR THE FISCAL YEAR 1895—CONTINUED.

No. Ord.	CONDEMNATIONS.	Appropriations and Balances.	Amount Expended.	Amount Charged Back.	Balance Unexpended.
	Amounts forward	\$ 703.58	\$128.75	\$ 357.58	\$219.25
6174	Confirm Verdict 11th St., South Winfield Place to Agnes Ave.	1.00		1.00	
6224	Confirm Verdict No. 3949 open and establish Alley between 13th and 14th, Olive to Wash.	1.00		1.00	
6431	Confirm Verdict No. 6076 open and establish Minnie St., Mathews & Hill's Add. to Olive St.	1.00		1.00	
6671	Confirm Verdict No. 6077 open and establish Bates Ave., Carlton Place to 15th St.	1.00		1.00	
6636	Confirm Verdict No. 6213 open Alley north of 10th St., Highland Ave. to Alley east.	1.00		1.00	
6876	Confirm Verdict No. 6215 open and establish Waltrond Ave., Bernard Place to 15th St.	1.00		1.00	
6499	Confirm Verdict No. 6254 open and establish Monroe Ave., St. John Ave. to Smart Ave.	4.20			4.20
7105	Confirm Verdict No. 6291 open and establish Alley between St. Louis Ave. and Union Ave., from Turner & Co.'s Addition to Bk. 6, Coates & Hopkins' Add.	1.00			1.00
7191	Confirm Verdict No. 6346 open, widen and establish 3th St., Laurel Ave. to Highland Ave.	1.00		1.00	
7290	Confirm Verdict No. 6395 open and establish Duncan Ave.	1.00		1.00	
7101	Confirm Verdict No. 6421, widen Main St. at 10th St.	139.15			139.15
7100	Confirm Verdict No. 6333, open and establish Alley north of 15th St., from Bellefontaine to Anew Ave.	1.00		1.00	
7133	Confirm Verdict No. 6351, open and establish Alley between Holmes and Charlotte Sts., from 22nd to 23rd Sts.	1.00		1.00	
7121	Confirm Verdict No. 6388, open and establish 21th St. from Lorust St. to E. L. W.'s of S. E. 1/4 S. R. T. 49, R. 33.	1.00		1.00	
	Footings	\$ 840.93	\$128.75	\$ 363.58	\$353.60
	Total appropriations (and balances) to be accounted for	\$2,785.08			
	Total expenditures for the fiscal year 1895		\$128.75		
	Total amount charged back			\$2,276.73	
	Balance of appropriations unexpended. Over to fiscal year 1896.				\$353.60

Respectfully submitted,
H. P. LANGWORTHY, Secretary.

**BOARD OF PUBLIC WORKS,
DEPARTMENT OF ENGINEERING,
April 20, 1896.**

To the Honorable Board of Public Works :

GENTLEMEN :

The City Engineer begs to submit the following report of this department for the fiscal year ending April 20, 1896.

**COMPARATIVE STATEMENT OF PUBLIC WORKS COMPLETED
DURING FISCAL YEARS 1892-3, 1893-4, 1894-5, 1895-6.**

Nature.	Amount.			
	1892-3	1893-4	1894-5	1895-6
Paving streets.....	\$ 219,185.24	\$ 522,485.67	\$ 403,024.20	\$ 489,984.30
Paving alleys	3,512.04	8,284.56	3,046.87	5,686.13
Curbing	83,185.94	36,093.08	11,458.33	15,959.95
First-class sidewalks	29,464.37	28,683.03	20,987.20	41,654.95
Plank sidewalks	7,842.79	8,380.95	3,528.15	3,093.72
Repairs plank sidewalks	8,891.48	11,627.81	6,743.08	13,835.82
Repairs first-class sidewalks and curbing	985.06	2,588.24	894.29	2,972.79
Grading streets.....	16,970.40	36,919.41	11,006.38	20,949.90
Grading alleys.....	1,015.23	5,101.38	1,856.18	2,704.54
District sewers	20,836.08	63,633.00	81,834.41	4,631.91
Public sewers	14,973.28	1,724.49	4,999.90	
O. K. Creek sewer	27,641.89	41,839.77		
Sundry public work (appropriation)		1,655.13	1,618.45	
Sundry public work (voucher)	619.44	346.66	1,970.25	77.56
Cleaning and sprinkling streets	2,364.18	25,522.65	44,715.00	19,380.33
Bridges and viaducts		15,300.00		
Totals.....	\$ 387,009.24	\$ 810,189.76	\$ 597,681.69	\$ 570,830.84

SEWERAGE.

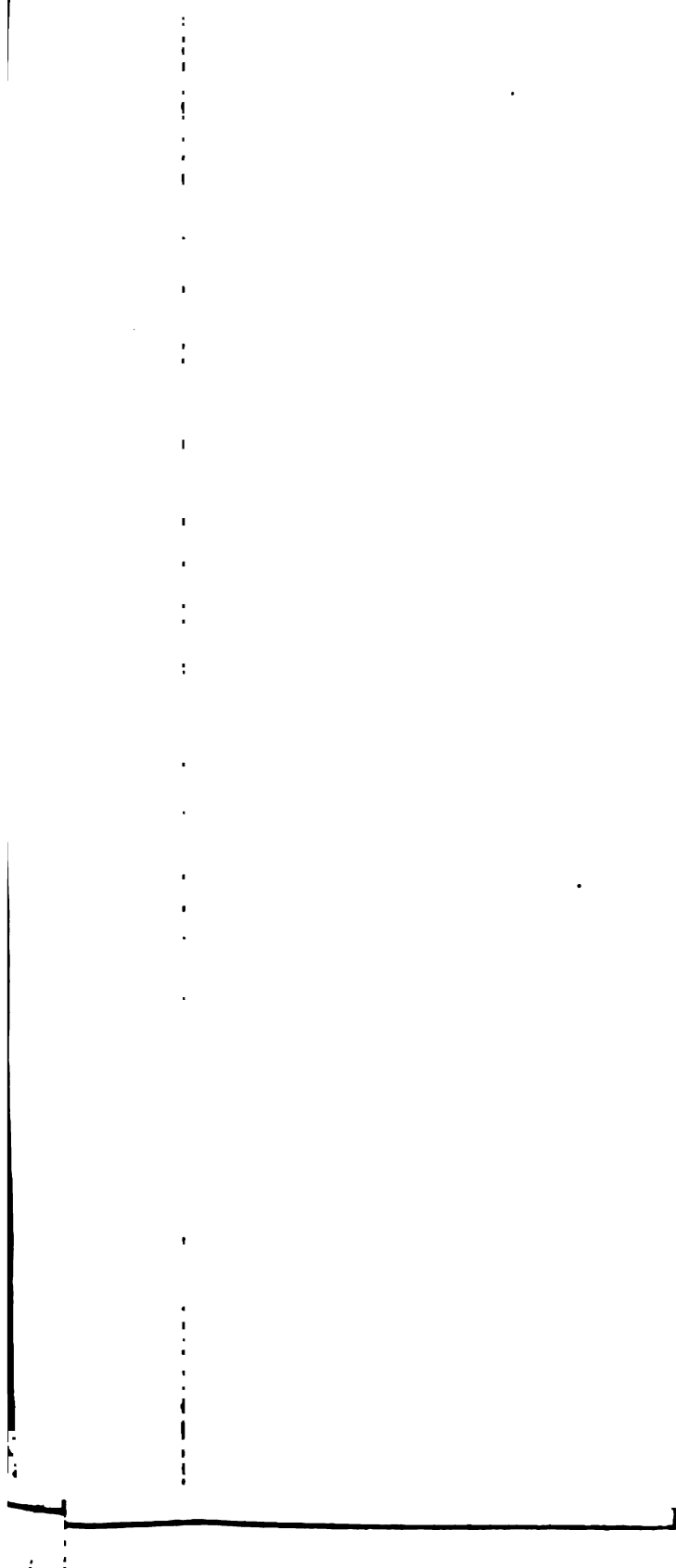
The study of the various sewerage problems mentioned in my last year's report has not been abandoned, and some new knowledge of our local needs has been obtained.

There were two rain storms during the season, which indicated quite plainly that the O. K. Creek Sewer, as built east of Grand avenue, is not too large for the maximum flow of rain water, when all the territory tributary to it is properly paved and sewered.

In the evening of June 17th, 1895, 2.20 inches of rain fell between 6:17 P. M. and 7:00 P. M., and of this amount 1.75

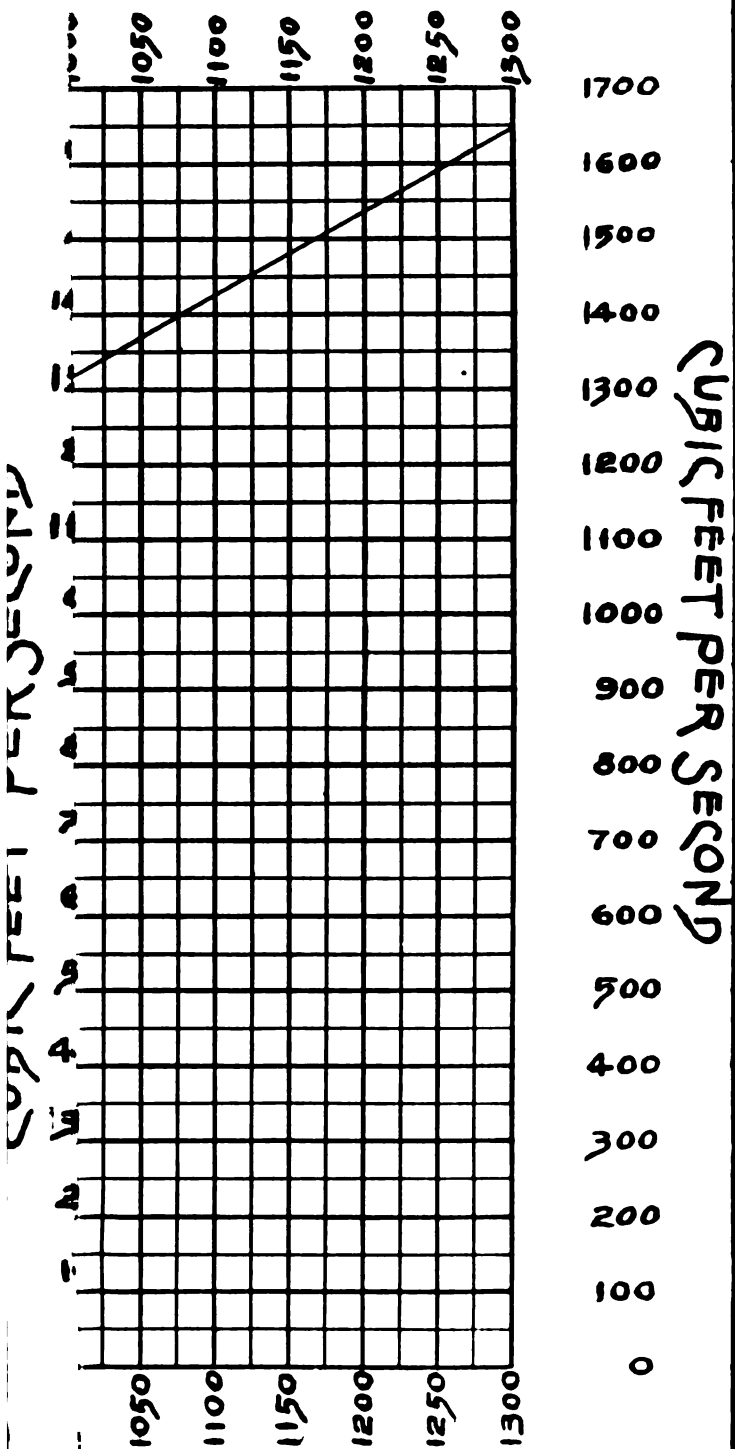
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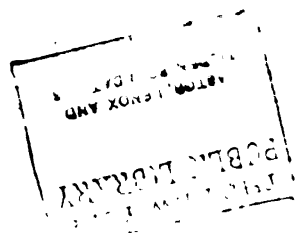
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TO THE EAST
DATE: 1948



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PUBLIC LIBRARY
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TILDEN FOUNDATIONS

PLATE N° 1.





inches fell in exactly twenty minutes, or at the rate of 5.25 inches per hour. From this rain the double arched section of the O. K. Creek Sewer at the Belt Line Crossing was slightly gorged for a short time.

When this occurred, the double-arched section was choked with from two to three feet of heavy deposit, leaving for it a theoretical discharge of only about 60 per cent. of that of the 15 foot 3 inch circular section just above it. When all the streets in this water-shed are paved and all district sewers built, there seems little doubt that a rain like the above mentioned would tax the largest portion of this large sewer to its full capacity.

From the above and other data, obtained at different times, the diagram (Plate I.) has been prepared, which gives at a glance the amount of storm water to be provided for in sewerage a district of any given area from one to thirteen hundred acres.

After determining the required capacity of a sewer at any point and the inclination or gradient to which it can be laid, the next step in the design is to compute the size of sewer which will give the required discharge.

This computation is very greatly facilitated by the use of the other diagram (Plate II.), which has been constructed and put in use during the past winter. It is submitted herewith, that it may be reproduced in more convenient size and permanently preserved for future use.

A beginning has been made on the intercepting system for the disposal of the sewage from the O. K. Creek water-shed ; it follows substantially the general design which was outlined in my report of last year. At the beginning of the fiscal year the sum of \$40,000.00 was apportioned, from the general revenue collections to be made during the year, for doing a portion of the work, extending easterly from a temporary outlet in Turkey Creek, at the intersection of Twenty-fifth street and Fairmount Avenue.

Of course, only a portion of this amount became available for use during the season. The letting of a contract for any

portion of it was further delayed by the failure of the Common Council to agree as to the section to be done first. On the 26th of March last, a contract was confirmed for constructing that portion between the Turkey Creek outlet and Jefferson street, and the work on it has been commenced. The price at which this section was let indicated very clearly that the preliminary estimates, made a year ago, were ample for all contingences that may be fairly anticipated in connection with the interceptor and outfall sewers.

The map herewith submitted (Plate III.) shows the location and profile of that portion between Turkey Creek and Wyandotte street, with alternate studies for the section between Wyandotte and Walnut streets. It also shows the location and profile for the O. K. Creek branch of the low level system, mentioned in my former report.

When the construction of this becomes necessary it can probably be built as a "joint district sewer."

At the beginning of the fiscal year the sum of \$8,000.00 was apportioned for the construction of an outlet sewer, beyond the Eastern City Limits, extending from the intersection of Fourteenth street and Cleveland avenue to the intersection of Ninth street and Fairview avenue. The route of this sewer is in part across private property, but the amount apportioned was intended to cover only the actual cost of the sewer, it being assumed that the owners of private lands would willingly give the right of way for the sewer in consideration of the sanitary benefits to be obtained from the free right to the use of same through house and cesspool connections.

It was not thought advisable to begin this work until the full length could be provided for in a single contract; therefore, nothing could be done, until the fund was practically all collected and available near the end of the fiscal year.

In the meantime it was found that some property owners were unwilling to give right of way as was expected and that probably an additional sum would need to be provided from

some source to purchase the same. For these reasons the construction of this sewer is not yet fully provided for.

Plans were prepared for a joint intercepting sewer to serve the districts which have been established east of Prospect avenue and between Seventh street and Howard street. This sewer will collect the sewage from the different District sewers and deliver it to the above mentioned outlet sewer.

The ordinance for this joint sewer was approved by the Board, passed the Lower House of the Common Council, but died in Committee of the Upper House with the old Council. It is desirable that the construction of these two sewers be provided for as early as possible, so that the districts in greatest need of them can be provided with local sewers.

BRIDGING.

No new bridges were built during the year, but general plans and estimates were prepared for a Viaduct called the Allen avenue or Twenty-third street Viaduct, which is intended to carry the street traffic between Allen avenue and Wyoming street over the tracks of the Kansas City, Ft. Scott & Memphis, the Atchison, Topeka & Santa Fe and the Kansas City, St. Joseph & Council Bluffs R. R. Companies. The cost of the structure was proposed to be paid by the railroads and other corporations to be benefited, but leaving the care and maintenance of the structure after completion, to be borne by the City. This is a much needed improvement and it is to be hoped that it will be carried to an early completion.

BRICK PAVEMENT.

During the winter of 1894-5, letters of inquiry were sent to the Engineers of some twenty different cities with a view to determining the best material for and method of filling the joints between the bricks in brick pavement. A few used only clean sand and fourteen used in either brick or stone block pavements, or both, a paving cement consisting of the residum from the distillation of coal tar either with or without the addition of a small portion of asphaltum, and four reported the

use of either a hydraulic cement filling applied in the form of a very thin grouting, or the so-called "Murphy Grout Filler." The Engineer of Buffalo, N. Y., recommended this so highly that I became convinced that it should be given a trial here. I therefore specified it for Hickory street, St. Louis avenue to Fifteenth street; Thirteenth street, Hickory to Liberty and Mulberry streets; Ninth street to Union avenue. Hickory street has been subjected to perhaps as heavy traffic as any street in the City since its completion last August, and yet the edges of the bricks are only slightly chipped.

Main street from Twelfth street to Nineteenth street was re-paved last fall, using for the greater part the old bricks put down in the summer of 1893, and which had become badly chipped on the surface edges. These bricks were turned over and the joints filled with the "Murphy Grout Filler." The old bricks were not as thoroughly cleaned as they should have been to allow the grouting to properly adhere to them. For this reason, only the portion of this street which was re-paved with new brick should be taken as a sample of the benefits obtained from the "Murphy Grout Filler," and that portion promises (judging from the short time it has been in use) very satisfactory results. The physical tests of paving brick have been somewhat irregular during the latter part of the year, owing to the burning of the foundry containing the rattler which we were using for the abrasion or impact test, and the others which were available have not been adapted as well to the work, being somewhat large and less perfect in construction and operation; it has been necessary to make some allowances accordingly.

Plans have now been prepared for a new rattler, to be owned by the City, and operated in the basement of the City Hall, thus placing it under the control of the department, by which more definite and satisfactory tests may be made.

ASPHALT PAVEMENT.

There were laid during the year 129,612.78 yards of street asphalt pavement, at a total cost of \$329,791.36.

The price per square yard was substantially the same as for that during the fiscal year 1894. The former standard of quality has been fully maintained, but the conviction seems to be growing, and with stronger grounds to support it, that the same standard could and should be furnished at a considerably reduced price; this sentiment is commonly expressed by a demand for "competition in asphalt."

Possibly competition is not the only method by which a reduction in price can be obtained, but it is doubtless the most natural one, and, if properly conducted, it will be the most satisfactory to the public. Justice to taxpayers clearly dictates that it be encouraged.

MACADAM PAVEMENT.

Only 55,739.20 yards of macadam were completed during the year, at a cost of \$49,814.42, but about 102,000 yards were under contract at the close of the year, the estimated cost of which is about \$65,000.00.

The past winter has been especially unfavorable for this class of improvements, on account of the frequent freezing and thawing of the surface and the amount of clay and mud brought on by wagons from unpaved streets.

The Southwest boulevard, from Main street to Broadway, has been especially unfortunate from these causes and the heavy traffic which it has to carry. The petition under which this improvement was ordered provided that the wearing course of Carter county granite should be crushed to a maximum size of one and one-half ($1\frac{1}{2}$) inches. The size proved too small to give the best results under heavy wheel loads, and the street is now badly in need of repairs.

SIDEWALKS.

The condition of plank sidewalks has gradually grown to be the cause of much concern and anxiety. It is estimated, from

the best available records, that the City now contains about 280 miles of plank walks, which have all been constructed since 1882. Of this amount, 244 miles were built from 1886 to 1891, both inclusive, or an average of over 40 miles per annum for a period of six years. Much of the larger portion of the plank walks were comparatively new when the Board of Public Works, in 1890, organized the division of Curbing and Sidewalks, as it now exists.

As these walks have grown older, the amount of necessary repair work has gradually increased, until now it is impossible for the force which has been regularly detailed for its supervision to properly inspect all walks in the different districts at least once every three months, as provided by Ordinance No. 1472, approved April 19th, 1890, and, at the same time, inspect the construction of new walks of all kinds, and curbing. I would therefore recommend that provision be made for increasing this force during the season of the year best adapted to doing sidewalk work.

The "hard times" which have depressed property owners for the past three years have led this department, with the advice of the "Board," to accept very cheap and temporary repairs, especially when made by the lot owner himself. The result of this temporary work is now apparent in the increased dilapidation in all directions, and a strong sentiment seems to have been created in favor of doing away with wooden sidewalks entirely. This, of course, can not be economically accomplished until all streets are graded and some provision made for protecting those on steep inclines from the wash of heavy rain storms; therefore many wooden walks must be allowed for several years to come. But, where allowed, more carefully selected material and more substantial construction than have usually been employed would be found economical, both to the City and property owners.

A very durable walk is obtained by the use of common vitrified paving brick, set on edge in the same manner as employed for roadway pavements, but placed on a sub-foundation of cin-

ders, like other walks, instead of the more expensive concrete base.

When bricks are laid flat-wise, as is more commonly done, they are more apt to work loose than when set on edge, but the first cost is from two to four cents per square foot less.

Granitoid, or artificial stone, is now so well made as to compare very favorably with any moderate priced natural stone, and is each year gaining in favor for curbing and gutter work. However, many people still do, and doubtless will continue to, retain a strong preference for good natural stone for all such work.

The ordinance (known as the Stoner ordinance), entitled "An ordinance to promote uniformity in the material and location of first-class sidewalks," has been in force nearly a year now, and, while it has made some additional work for the department, both in the field and office, the appearance of streets, where walks have been built in accordance with it, is much improved over those where every variety of first-class material was allowed in one and the same block.

DEPARTMENT OF TESTS.

The object of this department has been to aid in selecting the best available material for use in public works.

1st.—By determining from careful experimental tests what standard of strength, durability and other essential qualities could reasonably be maintained in the selection of materials; and by embodying such standard in the specifications for work to be done.

2nd.—By testing all material offered and rejecting such as fell below the standard.

CEMENT TESTS.

At the beginning of the fiscal year, the Cement Room was supplied with a Richle Bros. 1,000-pound cement testing machine and the usual complement of moulds, sieves, tanks and other appliances.

The engineer of one of the field parties was put in charge, and an order made by the City Engineer that all cement used

on public work must first be tested. All tests required were of neat cement.

During the year, 300 samples have been tested, involving the making of over 4,000 briquettes. Samples are taken from each car-load offered, and, if the tests prove satisfactory, the cement is accepted.

As a result of its system of tests, the City has now first choice of the cement on sale in this market.

A second practical result is, the manufacturers of the brands of natural cement commonly used in this locality are attempting, by the introduction of improved machinery and processes, to meet the City's requirements with all their product.

An exact record is kept of all tests made, giving brand, strength, fineness and activity of the cement. This record is commonly consulted by users of cement in the city. See Table No. V.

ARTIFICIAL STONE.

A series of tests were made during the year, to determine the transverse strength of artificial stone, as used in sidewalks and curbing, and was extended to include the effects of size of aggregate and the adhesion of cements to different materials.

Blocks of the size of a paving brick were made in a wooden mould 8 x 3.94 x 2.56 inches. These blocks were allowed to harden in damp sand for forty-five (45) days, and were then broken flat-wise with a span of 7 inches. About fifty (50) blocks were made. A few will illustrate the kind of information to be derived from the tests. See I., II., III. and IV.

Dyckerhoff Portland cement was used in the proportion of one part cement to three of the aggregate, by measure; 23 oz. of cement and from $7\frac{1}{2}$ oz. to 10 oz. of water went to the making of each block.

The aggregate varied in size from fragments $\frac{3}{4}$ inch in greatest dimension to dust that would pass a No. 100 sieve.

TABLE I.
TRANSVERSE STRENGTH OF ARTIFICIAL STONE.

No. of Block	Material.	Proportions of Ingredients.		Dimensions of Block.	Span.	Center Breaking Load.	Age in Days.	Remarks.
		Aggregate.	Cement.					
35	Kansas River sand	3	1	4 in. x 3.9 in. x 2.56 in.	7 in.	595 lb	45	Clean and medium sharp
36	Crushed plate glass.	3	1	.....	.....	735	45	Clean and very smooth.
37	River gravel	3	1	.....	.....	990	45	Clean and free from dust.
45	Limestone	3	1	.....	.....	1,325	46	Block weakened by voids.
43	Hydric flint	3	1	.....	.....	1,315	19	Clean and free from dust.
36	Slag	3	1	.....	.....	1,540	45	" " " "
37	Graufite	3	1	.....	.....	1,537	45	" " " "
32	Vinn's Red Brick	3	1	.....	.....	1,895	45	" " " "
33	Neat Cement	.....	1	.....	.....	2,000	45	Dyckerhoff Portland.

TABLE II.
EFFECT OF SIZE OF AGGREGATE UPON STRENGTH OF ARTIFICIAL STONE.

No. of Block	Material	Proportions of Ingredients.		Dimensions of Block.	Span.	Center Breaking Load.	Age in Days.	Remarks.
		Aggregate	Cement.					
17	Crushed Vin. Brick	3	1	4 in. x 3.9 in. x 2.56 in.	7 in.	960 lb	45	No. 5 Crushed Brick (1-2 in. to 3-4 in. in greatest dimension.)
18	4	1	.....	.....	1,110	45	No. 4 " " (1-1 in. to 1-2 in. in " " " ")
19	5	1	.....	.....	1,270	46	No. 3 " " (1-4 in. to 1-4 in. in " " " ")
20	6	1	.....	.....	1,045	46	No. 2 " " (1-3 in. to 1-6 in. in " " " ")
21	7	1	.....	.....	915	45	No. 1 " " (Between Nos. 3, 7, 1 and 20 Sieves.)
22	8	1	.....	.....	1,805	45	1 part of No. 1: 2 of No. 2: 3 of No. 3: 4 of No. 4: 5 of No. 5.
23	9	1	.....	.....	1,825	45	1 part of No. 2: 2 of No. 3: 3 of No. 4: 4 of No. 5
24	3	1	.....	.....	1,165 (?)	45	1 part of No. 3: 2 of No. 4: 3 of No. 5. Bad break.
25	4	1	.....	.....	1,410	46	1 part of No. 4: 2 of No. 5

TABLE III.
EFFECT OF DUST UPON STRENGTH OF ARTIFICIAL STONE.

No. of Block.	Material.	Proportions of Ingredients.		Dimensions of Block.	Span.	Center Breaking Load.	Age in Days.	Remarks.
		Aggregate.	Cement.					
4	lopin flint.....	3	1	8in x3.94in x2.56in.	7 in	1,070 lb	45	Containing stone dust.
5	lopin flint.....	3	1	.....	.....	1,150	45	Freed from dust on No. 20 Sieve.
14	Granite.....	3	1	.....	.....	1,227	46	Containing stone dust.
15	Granite.....	3	1	.....	.....	1,327	48	Freed from dust on No. 30 Sieve.
41	Crushed Vit. Brick.....	3	1	.....	.....	1,235	53	Containing 3% oz finer than No. 20 Sieve.
42	Crushed Vit Brick.....	.....	.....	.....	.....	1,660	52	Freed from dust on No. 20 Sieve.

TABLE IV.
EXPERIMENT WITH RANSON PATENT.

No. of Block.	Material.	Proportions of Ingredients.		Dimensions of Block.	Span.	Center Breaking Load.	Age in Days.	Remarks.
		Aggregate.	Cement.					
37	Kansas River sand.....	3	1	8in x3.94in x2.56in	7 in	995 lb	45	[wires inserted Same as No. 37 except has two $\frac{1}{4}$ in. twisted steel. Same as No. 24 except has two $\frac{1}{4}$ in. twisted steel.]
38	.....	3	1	.....	.....	1,235	45
24	.....	3	1	.....	.....	1,235	45
31	.....	3	1	.....	.....	2,480	46

TABLE V.
RECORD OF CEMENT TESTS.—CITY ENGINEER'S OFFICE, KANSAS CITY, MO.

BRAND.	1 Day.		7 Days.		28 Days.		3 Months.		6 Months.		Activity.		Fineness.	
	Strength.	Samples.	Strength.	Samples.	Strength.	Samples.	Strength.	Samples.	Strength.	Samples.	Initial Set. h. min.	Hard Set. h. min.	No. 50 Sieve.	No. 100 Sieve.
Ft. Scott	40.3	73	104	75	262	24	572	3	369	7	05.3	11.5	90.2	per cent
" "	51.5	77	109	77	218	18	245	1	338	5	05.3	09.7	91.0	.....
Utica	46.5	2	196	2	263	2	318	1	405	1	30.1	1	92.5	.....
Louisville	51	12	138	12	211	10	.....	.....	400	3	09.1	15.9	86.5	.....
Dickert	251	4	496	5	579	5	.....	.....	782	2	1	3	25	.....
Germania	246	4	522	5	605	4	.....	.....	539	1	1	4	45	.....
Wackerdorfer	219	6	493	6	633	1	647	1	774	1	1	4	45	.....
Stettin	226	3	444	4	561	4	.....	.....	.....	.....	1	4	45	.....
Royal Crown	176	1	363	1	485	1	.....	.....	518	1	21	4	13	.....
Globe	245	2	353	2	507	2	.....	.....	747	1	26	1	09	.....
K. B. & S.	129	1	466	1	640	1	.....	.....	.....	.....	25	18	25	.....
Alsen (white)	262	1	646	1	.....	.....	.....	.....	.....	.....	3	44	6	.....
" (yellow)	244	3	496	2	512	1	.....	.....	.....	.....	05.5	17.5	.....	.....
West Kent	207	1	350	1	502	1	590	1	.....	.....	17	30	.....	.....
Brooks' Shobridge	242	1	409	1	495	1	.....	.....	.....	.....	06	11	.....	.....
Burham	264	1	417	1	535	1	617	1	.....	.....	10	14	.....	.....
Hennepin	176	1	446	1	642	1	.....	.....	.....	.....	2	01	4	.....
Porta German	302	2	442	2	549	2	.....	.....	.....	.....	15.5	1	29.5	.....
Henry	48	3	495	3	580	3	.....	.....	.....	.....	47	2	50	.....
														86.0

GEO. JENKINS.

ASPHALT.

95 Contracts.

STREET PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 20, 1896. BRICK.

Street.	From	To	Corner Pavement.	Spaces between Brick.	Foundation.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Bills.
Seventh St.	Broadway.	Pennsylvania Av.	Ced Bk	Sand	6 in. concrete, 2 in. sand.	712 40	2,796 50	61 39	6 3,887 15	26
Seventh St.	Main St.	Delaware St.	Ced Bk	Sand	Old concrete, 2 in. sand.	130 00	252 40	1 32	833 17	00 ⁰⁰
Ninth St.	Washington St.	Pennsylvania Av.	None	Sand	6 in. concrete, 2 in. sand.	257 60	667 30	1 42	947 42	6
Ninth St.	Pennsylvania Av.	Jefferson St.	None	Sand	6 in. concrete, 2 in. sand.	257 90	642 30	1 42	912 17	7
Baltimore Ave.	Twelfth St.	Thirteenth St.	None	Sand	6 in. concrete, 2 in. sand.	129 00	1,738 60	1 49	2,620 31	24
Hickory St.	St. Louis Ave.	Fifteenth St.	Ced. Bk	Port. Cem. Grouting	Old concrete, 2 in. sand.	2,191 30	5,940 50	1 19 ¹ / ₂	10,782 08	38
Cherry St.	Eight St.	Twelfth St.	Ced Bk	Sand	6 in. concrete, 2 in. sand.	1,454 90	5,194 60	1 43 ¹ / ₂	7,451 25	76
Thirteenth St.	Liberty St.	Hickory St.	None	Port. Cem. Grouting	6 in. concrete, 2 in. sand.	199 70	950 10	1 53	1,453 63	18
Twenty fourth St	Trace Ave.	Lydia Ave.	None	Sand	4 in. sand.	315 70	1,084 60	.99	1,073 75	4
Mulberry St.	Ninth St.	Union Ave.	Ced. Bk	Port. Cem. Grouting	2 in. sand, 6 in. concrete.	632 90	1,142 60	1 65	1,885 23	11
Flora Ave.	Eighteenth St.	Nineteenth St.	None	Sand	6 in. concrete, 2 in. sand.	144 70	1,508 90	1 48 ¹ / ₂	2,240 72	25
Fourteenth St.	Broadway.	Street Car tracks	None	Sand	4 in. concrete.	1,208 70	2,571 20	1 47	3,779 66	45
Twentieth St.	S W Boulevard	Summit St.	Ced Bk	Sand	6 in. concrete, 2 in. sand.	2,692 30	7,936 90	1 43	11,349 77	33
		Oak St.	Part Ced Bk	Sand						
13 Contracts.		192-100 miles.				10 157 70	35,486 40		648,719 25	318

* constructed by owners

CEDAR BLOCKS.

Street	From	To	Former Pavement.	Foundation.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Bills.
Missouri Ave.	Delaware St.	Walnut St.		Cedar blk min. old concrete, 2 in. sand.	600 50	1,762 00	6 1 12	6 1,973 44	22
One contract		11-100 miles.			600 50	1,762 00	6 1 12	6 1,973 44	22

STREET PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 20, 1896.
MACADAM.

Street.	From	To	Former Pavement.	Specifications.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Bills.
Independence Av.	West line Woodland Ave.	East line of Walnut St.	Ced. Bk.	3 1/2 in. crushed granite, bordered with gravel, 10 in. limestone.	4,450.90	20,328.70	\$1.24	\$25,228.84	99
Third St.	Wyandotte St.	Broadway.	Macadam	3 in. Osage River gravel, 2 1/2 in. Beth. Falls limestone, 9 in. limestone.	712.40	2,884.50	84 1/2	2,437.40	40
Campbell St.	Sixteenth St.	Eighteenth St.	None	3 in. Osage River gravel, 9 in. native limestone, brick margin.	936.19	3,869.00	90 1/2	3,501.45	52
Twenty-first St.	S. W. Boulevard.	West Prospect Pl.	None	1 in. crushed screenings, 6 1/2 in. Beth. any Falls limestone, 6 1/2 in. native limestone, brick margin.	1,946.00	7,538.90	70 1/2	5,277.23	48
Twenty-fourth St	S. W. Boulevard.	Fairmount Ave.	Ced. Bk.	3/4 in. gravel, brick margin; 6 1/2 in. Beth. any Falls limestone, 6 1/2 in. native limestone.	1,790.60	7,804.20	62	4,328.60	50
S. W. Boulevard.	East line Broadway.	Easterly line Lot 21, Blk. 1, Gates Cedar Add. produced Blocks	240 ft. Cedar Blocks	3/4 in. gravel, brick margin; 6 1/2 in. Beth. any Falls limestone, 6 1/2 in. native limestone.	2,433.00	13,813.90	64	8,840.90	106
6 Contracts.					12,368.99	55,739.20		\$49,814.42	395

2 32-100 miles.

STONE BLOCKS.

Street.	From	To	Former Pavement.	Specifications.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Bills.
Fifth St.	Broadway.	Bluff St.	Sto. Bk.	Re-construct and repair.	923.60	615.00	\$2.10	\$4,227.40	62
Seventh St.	Main St.	Walnut St.	Ced. Bk.	Sd. stone blk., 2 1/2 in. sand, 6 in. concrete.	279.10	4,317.50	.68	2,686.35	5
Sixth St.	Main St.	Walnut St.	Ced. Bk.	Sd. stone blk., 2 1/2 in. sand, 6 in. concrete.	283.00	868.80	2.77	2,722.06	8
3 Contracts.					1,487.70	6,885.00		\$9,635.83	75

23-100 miles.

ALLEY PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 20, 1896.

BRICK.

Between.	From.	To.	Foundation.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Bills.
Troust Ave. and Forest Ave.	Tenth St.	Eleventh St.	6in. concrete, 2in. sand	383.00	641.50	\$ 1.34	\$ 885.27	22
Pennsylvania Ave. and Jefferson St.	Eleventh St.	Twelfth St.	6in. concrete, 2in. sand	272.40	356.80	1.63	541.58	20
Tenth St. and Eleventh St.	Santa Fe St.	Mulberry St.	6in. concrete, 2in. sand	399.50	430.10	1.48½	623.95	34
Sixth St. and Seventh St.	Central St.	Midway bet. Central and May Sts.	6in. concrete, 2in. sand	150.80	262.10	1.59	416.74	11
St. Louis Ave. and Union Ave.	Santa Fe St.	Mulberry St.	6in. concrete, 2in. sand	405.60	395.80	1.59	629.32	34
Wall St. and Waudette St.	Seventh St.	Eight St.	6in. concrete, 2in. sand	324.30	634.50	1.50	936.75	19
Locust St. and Cherry St.	Eight St.	Ninth St.	6in. concrete, 2in. sand	287.90	325.00	1.58½	515.18	12
Seven contracts.		42-100 miles.		3,225.50	3,025.80		\$ 4,588.74	152

STONE BLOCKS.

Between.	From.	To.	Foundation.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Bills.
Immediately S. of Thirteenth St	Hickory St.	A point 244 ft. east of Hickory St.	6in. concrete, sand	235.00	394.00	\$ 2.78½	\$ 1,097.29	21
One contract.		4-100 miles		235.00	394.00	\$ 2.78½	\$ 1,097.29	21

RECAPITULATION OF STREET PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 20, 1896.

Material Used.	No. of Contracts.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Sq. Yrd.	No. of Bills.
Trinidad Asphalt	35	34,717.75	6.57	129,612.78	\$329,791.36	\$2.514	1,680
Brick	13	10,157.70	1.92	35,486.40	48,719.25	1.307	813
Macadam	6	12,268.99	2.32	55,739.20	49,814.42	.884	395
Stone Blocks	3	1,487.70	0.28	6,885.00	9,635.83	1.40	75
Cedar Blocks	1	600.50	0.11	1,762.00	1,973.44	1.12	22
	58	59,232.64	11.21	227,485.38	\$439,934.30		2,465

RECAPITULATION OF ALLEY PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 20, 1896.

Material Used.	No. of Contracts.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Sq. Yd.	No. of Bills.
Brick	7	2,325.50	0.42	3,025.80	\$1,538.74	\$1.516	152
Stone Blocks	1	235.00	0.04	394.00	1,097.29	2.781½	21
	8	2,460.50	0.46	3,419.80	\$5,636.03		173

STATEMENT OF STREETS PAVED TO APRIL 20, 1896.

Material Used.	Lineal Feet.	Miles.
Asphalt	143,138.95	27.48
Macadam	67,450.99	12.77
Granite or Stone Blocks.	11,880.10	2.25
Vitrified Brick	77,175.00	14.61
Cedar Blocks.....	150,544.05	28.52
		95.63

Cedar blocks taken up 45,009 lin. ft., 8.52 miles.

CURBING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 20, 1896.

Street	Side.	From	To	Thickness Inches.	Constructed by Owners.			Constructed by Public Contract.			Total Constructed.		No. of Bills.
					Lineal Feet.	Cost per Foot.	Cost.	Lineal Feet.	Cost per Foot.	Cost.	Lineal Feet.	Cost.	
Reconstruct Garfield Ave	Both	Independence Av	Pendleton Ave.	5	200.00	40c	\$ 80.00	61.50	15c	\$ 9.22	3,738.60	\$ 506.47	26
Wabash Ave	Both	Eight St	North St	5	2,575.00	12c	\$99.00	902.10	12c	108.25	68.72	338.72	3
Michigan St	Both	Eleventh St	Twelfth St.	5	600.00	15c	\$72.00	161.70	42½c	64.05	751.60	\$503.57	2
Wabash Ave	Both	Sixth St.	Eight St.	5	636.00	67c	\$425.52	595.60	67c	254.25	1,142.00	\$496.59	12
Twentieth St.	Both	Grand Ave.	McGee St.	5	150.00	40c	\$60.00	38.40	5c	1.94	595.60	223.64	3
Twenty-first St.	Both	S. W. Boulevard.	W. Prospect Pl.	5	1,100.00	45c	\$495.00	12,769.40	40½c	1,138.12	3,874.70	\$1,623.62	36
Campbell St	Both	Sixteenth St.	Nineteenth St.	5	1,150.00	45c	\$517.50	1,561.10	38½c	604.92	2,711.10	\$1,122.42	44
Euclid Ave.	Both	Thirteenth St.	Fifteenth St.	5	756.00	50c	\$378.00	1,211.70	48½c	590.70	1,977.70	\$973.70	46
Twenty-fourth St	Both	Tracy Ave.	Lydia Ave.	5	370.00	55c	\$203.50	366.60	53c	194.29	736.60	\$397.79	2
Tracy Ave	Both	Fifteenth St.	Seventeenth St.	5	1,200.00	50c	\$600.00	8.90	10c	7.92	1,606.60	\$1,383.35	19
Garfield Ave	Both	Seventh St.	Eight St.	5	95.00	50c	\$47.50	397.70	46c	262.71	627.20	\$10.21	10
Trout Ave	Both	Twenty-eighth St	Thirty-first St.	5	3,640.00	50c	\$1,820.00	345.50	45c	153.47	4,025.50	\$1,993.47	6
Flora Ave	Both	Nineteenth St.	Twenty-fifth St.	5	1,660.00	45c	\$747.00	5,011.30	40½c	2,053.35	6,104.30	\$2,532.35	162
Lafla Ave	Both	Twenty-third St.	Twenty-fifth St.	5	2,340.00	43c	\$1,006.20	366.20	42½c	155.63	2,566.20	\$1,101.63	9
Jefferson St	Both	Seventeenth St.	Eighteenth St.	5	1,800.00	96c	\$1,710.00				1,300.00	\$1,170.00	.....
Jefferson St	Both	Twentieth St.	S. W. Boulevard	5	474.00	45c	\$213.10	2,255.40	10c	1,066.14	2,733.40	\$1,281.24	71
16 Contracts		6 67-100 miles.			18,117.00		\$8,275.46	17,135.80		\$7,683.49	35,253.80	\$15,958.95	452

*Combined curb and gutter

FIRST-CLASS SIDEWALKS CONSTRUCTED DURING FISCAL YEAR ENDING AP. 20, 1896.
ARTIFICIAL STONE AND HEXAGON BLOCKS.

Street.	Side	From.	To.	Width Feet.	Constructed by Public Contract.			Constructed by Property Owners.			Total Constructed.			No. of Bills.
					Lineal Feet.	Square Feet.	Amount.	Lineal Feet.	Square Feet.	Amount.	Lineal Feet.	Square Feet.	Amount.	
Prosper Ave West.		Indep. Ave. 9th St.	12th St.	6	257.30	1,548.00	17	262.44	1,029.00	1,101.60	1,277.30	7,643.80	1,264.04	8
Wash'n St. West		9th St.	10th St.	6	137.56	825.40	17	160.85	306.67	331.20	444.23	2,665.40	492.05	3
Garfield Ave. Both.		13th St.	15th St.	6	845.60	2,073.60	17	852.51	1,535.05	1,637.80	1,880.60	11,283.60	2,010.31	14
20th St. S. W. Both.		Grand Ave.	McGee St.	6	134.50	807.20	19	153.37	133.34	160.00	267.94	1,607.20	313.37	1
Park Ave. Both.		Pendlin Ave.	9th St.	6	1,224.50	7,871.00	16 1/2	1,224.50	5,250.00	5,670.00	6,478.50	38,871.00	6,898.50	32
14th St. S. W. Both.		Holmes St.	Charlotte St.	6	24.50	147.00	16 1/2	24.50	233.00	273.40	279.50	1,677.00	299.90	1
Grand Ave. East.		96 ft. south of 11th St.	12th St.	15	48.00	720.00	20	144.00	280.00	690.00	278.00	4,170.00	834.00	1
Campbell St.		16th St.	17th St.	6	24.50	147.00	17 1/2	25.97	330.00	356.40	354.50	2,127.00	392.37	1
Garfield Ave. West.		14th St.	15th St.	6	60.00	360.00	16 1/2	60.00	330.00	356.40	390.00	2,310.00	416.40	4
17th St. S. W. Both.		Penn. Ave.	Jefferson St.	6	133.33	800.00	18	144.00	132.60	131.27	265.83	1,595.60	275.27	1
Cherry St. East.		14th St.	15th St.	6	53.00	318.00	16 1/2	53.00	406.00	406.00	459.00	2,754.00	459.00	1
Troost Ave. Both.		14th St.	15th St.	6	308.16	1,849.00	19	351.48	766.66	828.00	1,074.82	6,419.90	1,179.49	11
Prichard St. Both.		McGee St.	W. 1st Ave.	9	491.11	3,928.90	19	749.49	945.00	1,416.40	1,436.11	11,488.90	2,185.90	17
14th St. S. W. Both.		Grand Ave.	McGee St.	8					250.00	2,000.00	250.00	2,000.00	440.00	
11th St. S. W. Both.		Grand Ave.	McGee St.	6					309.33	1,850.00	333.00	1,850.00	333.00	
14th St. S. W. Both.		W. 1st Ave.	Central St.	6					366.66	2,200.00	366.66	2,200.00	394.00	
Garfield Ave. West.		7th St.	9th St.	5					372.00	409.20	372.00	1,860.00	409.20	
Grand Ave. East.		11th St.	96 ft. south of 11th St.	11 1/2	Not completed.									
Garner Ave. Nor.		In front of Blk 3, E. A. lots 3 & 4.	Phillips, s.	6										
Holmes St. East.		15th St.	16th St.	5					37.50	40.50	37.50	225.00	40.50	
27th St. S. W. Both.		Troost Ave.	Forest Ave.	6					520.00	572.00	520.00	2,600.00	572.00	
14th St. S. W. Both.		Locust St.	Cherry St.	6					316.66	442.00	316.66	1,900.00	342.00	
14th St. S. W. Both.		McGee St.	Cherry St.	6					283.33	306.00	283.33	1,700.00	306.00	
Wabash Ave. West.		Indep. Ave.	30 ft. north	6					566.66	612.00	566.66	3,400.00	612.00	
									600.00	648.00	600.00	3,600.00	648.00	
24 contracts.			3.5 miles		3,246.06	20,090.90		63,710.11	15,261.41	95,137.50	116,507.47	116,024.40	921,209.28	90

FIRST-CLASS SIDEWALKS CONSTRUCTED DURING FISCAL YEAR ENDING APL. 20, 1896.
BRICK.

Street.	Side.	From	To	Constructed by Public Contract.				Constructed by Property Owners.				Total Constructed.			No. of Bills.
				Lineal Feet.	Square Feet.	Per Cent.	Amount.	Lineal Feet.	Square Feet.	Per Cent.	Amount.	Lineal Feet.	Square Feet.	Amount.	
Campbell St.	West.	15th St.	16th St.	120.00	720.00	8 1/2	68.40	320.00	1,920.00	10	198.00	450.00	2,700.00	256.40	8
Campbell St.	West.	17th St.	18th St.	209.50	1,257.00	8 1/2	118.30	356.67	2,140.00	10	220.00	575.97	3,155.90	359.30	5
McGee St.	Both.	12th St.	18th St.	263.52	1,581.12	10 1/2	155.33	535.04	3,150.00	10	150.00	514.72	35,093.30	3,389.23	8
Campbell St.	West.	16th St.	17th St.	71.50	429.00	8 1/2	190.03	175.00	1,050.00	10	105.00	346.50	2,075.00	195.03	7
Cherry St.	East.	16th St.	17th St.	24.75	148.50	10 1/2	15.59	110.00	660.00	10	246.00	434.70	2,608.50	281.51	1
Cherry St.	East.	18th St.	19th St.	224.31	1,345.86	8 1/2	145.71	438.38	2,630.00	10	380.00	923.62	5,542.00	593.71	11
Cherry St.	West.	18th St.	19th St.	379.86	2,279.16	8 1/2	193.73	166.67	1,000.00	9	90.00	546.53	3,278.20	283.73	15
Holms St.	Both.	17th St.	18th St.	632.05	3,792.30	8 1/2	323.99	500.00	3,000.00	9	270.00	1,123.05	6,738.30	593.99	26
13th St.	South	Virginia Ave.	14th Ave.	298.75	1,792.50	8 1/2	152.18	680.00	4,080.00	10	108.00	298.75	1,792.50	132.18	2
Troost Ave.	Both.	14th St.	15th St.	198.12	1,188.00	9 1/2	111.51	1,206.25	7,237.50	8 1/2	820.25	1,473.88	11,787.10	995.19	6
Prich St.	Both.	Troost Ave.	McClure St.	267.12	1,602.72	10 1/2	175.24	1,206.25	7,237.50	8 1/2	820.25	1,473.88	11,787.10	995.19	6
14th St.	Both.	Grand Ave.	Highland Ave.	1,125.67	6,754.02	8 1/2	665.45	3,125.00	18,750.00	10	2,125.00	4,250.67	26,000.00	2,890.45	18
14th St.	North	Legend St.	Cherry St.	853.33	5,119.98	10	283.33	853.33	5,119.98	10	230.00	383.33	2,300.00	170.00	...
Campbell St.	East.	15th St.	16th St.	550.00	3,300.00	10	550.00	550.00	3,300.00	10	550.00	550.00	3,300.00	330.00	...
Campbell St.	East.	17th St.	18th St.	433.33	2,600.00	10	433.33	433.33	2,600.00	10	260.00	433.33	2,600.00	260.00	...
Charlotte St.	West.	11th St.	18th St.	3,972.23	23,829.38	10	82,317.35	14,492.91	85,620.00	...	9,002.35	18,465.14	122,239.10	811,819.61	108
16 contracts.				3,972.23	23,829.38	10	82,317.35	14,492.91	85,620.00	...	9,002.35	18,465.14	122,239.10	811,819.61	108

ALLEYS GRADED DURING FISCAL YEAR ENDING APRIL 20, 1896.

Between	From	To	Cubic Yards Earth.				Cubic Yards Stone.				Drain Pipe.		Rip Rap		Miscellaneous.			Total Cost.	No. of Bills.
			Lineal Feet.	Excavation	Price per Yard.	Embankment.	Price per Yard.	Excavation.	Price per Yard.	Size.	Lineal Feet.	Price per Foot.	Cubic Yards.	Price per Yard.	Specifi- cation.	Measure- ment.	Price.		
Troost and Forest Aves.	26th St.	27th St.	574.00	315.60	21													75.74	30
Jefferson and Summit Sts	Alley inly	S. 16th St.	694.50	217.20	32													69.50	57
Immy's South of 16th St.	Summit St.	Jefferson St	269.50	193.40	35													67.85	15
Pennsylvania Ave and	Alley inly																		
Washington St.	S. 16th St.	17th St.	271.00			284.30	5	153.90	60										
Tracy and Lydia Aves.	23rd St.	24th St.	410.00	657.40	19													106.56	56
Holly St. and W. Pros (Pl.	23rd St.	30th St.	535.40	1,369.00	12			93.70	30	15	105.00	65c.	8.00	\$1.00				124.91	16
Immy's South of 16th St.	Jefferson St	Penn'a Ave	271.00	109.20	24 1/2													266.04	46
Holly St. and W. Pros (Pl.	27th St.	28th St.	600.00			679.20	10				52.00	\$1.00						31.12	13
Locust and Cherry Sts.	5th St.	9th St.	886.04	505.50	27 1/2													119.92	48
Mercier and Holly Sts.	24th St.	29th St.	659.00			1,513.20	10				48.00	65c.	23.02	\$1.12 1/2	Masonry	68.50	\$2.25	425.36	52
Wandotte St. and Balti- more Ave	75 feet N. of	11th St.									50.00	\$1.25							
Terrace and Mercer Sts.	24th St.	30th St.	75.00	658.90	45													296.46	6
Park Ave. and Olive St.	Pen'd'n Ave	St. John Ave	558.00			2,211.60	10	25.50	10	18	200.00	65c.	41.09	\$1.25	Masonry	82.20	\$2.35	605.26	44
Immy's South of 16th St.	Forest Ave.	Tracy Ave.	462.00	1,209.40	10													120.86	38
Park Ave. and Olive St.	20th St.	21st St.	315.00			1,449.10	12											173.86	14
			435.00	273.30	30													81.96	55
1.22 miles.			6,429.84	5,529.50		6,197.40		233.10			455.00		68.12			150.70		\$2,704.54	507

**DISTRICT SEWERS CONSTRUCTED DURING FISCAL YEAR
ENDING APRIL 20, 1896.**

District Number.	Ordinance Number.	Catch Basin Connections				PIPE SEWER.						BRICK SEWERS.		
		12-inch Pipe		18-inch Pipe		8-inch			10-inch.			3 Feet, 6 Inches.		
		Lineal Feet.	Price per Foot.	Lineal Feet.	Price per Foot.	Lineal Feet	Price per Foot.	Average Depth.	Lineal Feet.	Price per Foot.	Average Depth.	Lineal Feet.	Price per Foot.	Average Depth.
43 Joint.	6,177	.....	.....	.....	.....	12,295	12c	15.00	197.6	75c	5.00	.....	.....	.....
42-44 107.	6,623	111.5	40c	181.2	65c	.....	.....	.....	.....	.....	.....	631.3	3.10	.....
		111.5		181.2		12,295			197.6			631.3		

DISTRICT SEWERS.—CONTINUED.

District Number.	Ordinance Number.	Man Holes.		Catch Basins.		Rock Excavation.		Lumber.		Rip Rap		Total Lineal Feet.	Total Cost.	No. of Tax Bills.
		No.	Price Each.	No.	Price Each.	Cubic Yds.	Price per Yd	Feet, B. M.	Price pr. 1000	Cubic Yds.	Price per Cubic Yard.			
43.....	6,177	6	\$20.00	...	.....	705.90	\$ 2.50	4,204.30	\$20.00	3.70	1.00	1,427.10	\$ 2,268.27	1,343
Joint														
42-44. 107.	6,623	4	25.00	3	\$30.00	85.90	.01	1,779.00	30.00	.....	.....	924.00	2,363.64	477
		10		3		791.80		5,983.30		3.70		2,351.10	\$ 4,631.91	1,820

**REPAIRS FIRST-CLASS SIDEWALKS AND CURBING
DURING FISCAL YEAR ENDING APRIL 20, 1896.**

District.	New Curb Lin. Feet	Coal Holes	Reset Curb Lin. Feet.	Repairs Sidewalks. Sq. Feet.	Stop Boxes. Number.	Total Amount.	No. of Bills.
General.....	3,046.30	3	6,590.00	1,009.00	1	\$ 2,922.79	409
	3,046.30	3	6,590.00	1,009.00	1	\$ 2,922.79	409

**REPAIRS SECOND-CLASS SIDEWALKS DURING FISCAL YEAR
ENDING APRIL 13, 1896.**

District.	New Lumber. Feet B. M.	Old Lumber. Feet B. M.	Grading. Cubic Yards.	Total Cost.	No. of Bills.
District No. 1	139,568.00	186,880.00	85.00	\$ 3,506.93	978
District No. 2	157,784.00	149,500.00	42.00	3,562.69	844
District No. 3	294,241.00	301,765.00	336.00	6,762.21	1,510
	591,593.00	638,145.00	463.00	\$13,835.82	3,332

**MISCELLANEOUS PUBLIC WORK CONSTRUCTED
DURING FISCAL YEAR ENDING APRIL 20, 1896.—PAID FOR BY VOUCHER.**

Contractor.	Specifications.	Amount.
F. P. McCormick.....	Constructing extra Stone Pavement in front of Engine House at 5th and Bluff Sts., 27 9-10 Sq. Yards @ \$2.78.	\$ 77.56

STREET SPRINKLING DONE DURING FISCAL YEAR ENDING APRIL 20, 1896.

Street.	From.	To.	Date Sprinkled.		Time.		Lineal Feet of Street.	Cost per Month Street Foot.	Lineal Times Property Day.	No. of Tax Bill.	Total Cost.
			From.	To.	Mos.	Days.					
Boardway, complete.	Third St.	Eleventh St.	March 1, 1895	Nov. 30, 1895	9	...	2,904.00	2.85-100	4,748.20	4	714.17
Bluff St., complete.	St. Louis Ave.	Fifth St.	March 1, 1895	Nov. 30, 1895	9	...	1,987.00	5	1,980.90	4	263.48
Boardway.	Eleventh St.	16th St.—East.	June 8, 1895	Nov. 30, 1895	5	23	2,344.00	1 1/4	3,975.23	3	181.76
Boardway.	Sixteenth St.	Seventeenth St.	June 21, 1895	Nov. 30, 1895	5	5	616.50	1 6-85	1,276.57	4	40.76
Cherry St., complete.	Fourteenth St.	Nineteenth St.	March 1, 1895	Nov. 30, 1895	9	...	2,429.00	3	4,411.43	4	465.88
Campbell St., complete.	Ninth St.	Sixteenth St.	March 1, 1895	Nov. 30, 1895	9	...	3,242.00	2 3/4	8,640.21	4	832.40
Charlotte St.	Indep. Ave.	Fifth St.	June 8, 1895	Nov. 30, 1895	5	23	1,018.50	1 1-5	1,834.16	3	70.48
11th St., complete.	Santa Fe St.	Liberty St.	March 1, 1895	Nov. 30, 1895	9	...	1,091.00	3 1/4	1,970.00	4	261.82
Eleventh St.	Main St.	Grand Ave.	June 21, 1895	Nov. 30, 1895	5	5	517.00	1 19-20	920.50	5	58.77
Eight St.	Mail St.	Hickory Street.	June 8, 1895	Nov. 30, 1895	5	23	2,859.00	1 1-5	4,259.00	3	181.84
Delaware St.	Fourth St.	Ninth Street.	June 21, 1895	Nov. 30, 1895	5	5	1,918.00	1 24-100	8,480.53	4	181.10
Forest Ave., complete.	Indep. Ave.	Fifth Street.	March 1, 1895	Nov. 30, 1895	9	...	1,375.50	2 3/4	2,498.43	4	88.240.44
14th St., complete.	Virginia Ave.	Woodland Ave.	March 1, 1895	Nov. 30, 1895	9	...	1,711.00	2 3-5	2,740.78	4	68.400.37
15th St., complete.	Virginia Ave.	Prospect Ave.	March 1, 1895	Nov. 30, 1895	9	...	4,316.00	8 19-20	7,174.68	4	324.1534.83
Fourth St.	Grand Ave.	Broadway	June 8, 1895	Nov. 30, 1895	5	23	2,070.50	1 83-100	3,453.90	3	72.158.80
Fifth St.	Broadway.	Grand Ave.	June 8, 1895	Nov. 30, 1895	5	23	2,035.00	1 31-100	3,548.44	4	156.48
Grand Ave.	Eight St.	Twenty-first St.	June 21, 1895	Nov. 30, 1895	5	5	6,024.00	1 19-10	10,740.01	4	800.610.48
Grimes St.	Sixteenth St.	Sixteenth St.	June 8, 1895	Nov. 30, 1895	5	23	1,921.00	1 1-5	3,488.60	3	110.136.01
Harrison St., complete.	Sixteenth St.	Eighteenth St.	March 1, 1895	Nov. 30, 1895	9	...	931.00	2 3/4	1,763.91	4	188.230.42
Holmes St.	Indep. Ave.	Third St.	June 8, 1895	Nov. 30, 1895	5	23	1,500.00	1 1-5	2,618.40	3	69.103.80
Indep. Ave., complete.	Grand Ave.	Woodland Ave.	Aug. 13, 1895	Nov. 30, 1895	3	19	5,939.00	49-50	9,609.08	4	310.29
Liberty St., complete.	Twelfth St.	300 ft. S. of 15th St.	March 1, 1895	Nov. 30, 1895	9	...	2,925.00	2 3-44	4,505.30	4	174.723.94
Missouri Ave.	Delaware St.	Forest Ave.	July 5, 1895	Nov. 30, 1895	4	27	4,464.00	1 1-10	7,528.95	3	239.89
Main St.	Third St.	Nineteenth St.	June 21, 1895	Nov. 30, 1895	5	10	7,051.00	1 19-20	12,440.74	5	409.233.30
Ninth St., complete.	Prospect Ave.	Eastern City Lim.	March 1, 1895	Nov. 30, 1895	9	...	3,870.00	2 9-10	7,449.40	4	205.1,010.07
Nineteenth St.	Wyoming St.	State Line	June 21, 1895	Nov. 30, 1895	5	10	894.00	1 19-20	1,649.64	3	6.92.98
Amount forward							66,272.00		116,178.40	3,877	9,619.44

STREET SPRINKLING DONE DURING FISCAL YEAR ENDING APRIL 20, 1896,
CONTINUED.

Street.	From	To	Date Sprinkled.		Time.	Lineal Feet of Street.	Cost per Month per Lin. Foot.	Lineal Feet of Property.	Times per Day.	No. of Tax Bills.	Total Cost.
			From	To	Mos. Days						
Amount brought forward											
Ninth St.	Santa Fe St	State Line.	June 8, 1895	Nov. 30, 1895	5 23	66,222.00	116,178.40	3	3	3,877	9,618.48
Ninth St.	Main St.	Broadway	June 8, 1895	Nov. 30, 1895	5 10	2,521.00	4,836.36	3	3	133	181.72
Ninth St.	Grand Ave.	Locust St.	June 8, 1895	Nov. 30, 1895	5 28	1,863.00	2,280.70	5	5	32	105.39
16th St., complete	Liberty St.	Bell St.	Mar. 1, 1895	Nov. 30, 1895	9 25	920.00	1,533.00	4	4	20	71.09
Santa Fe St., complete	Eight St.	Twelfth St.	Mar. 1, 1895	Nov. 30, 1895	9 25	866.00	1,508.00	4	4	26	212.65
Seventeenth St.	Madison St.	Holly St.	June 21, 1895	Nov. 30, 1895	5 10	1,609.00	2,479.63	4	4	116	434.48
St. Louis Ave.	Union Ave.	State Line.	June 21, 1895	Nov. 30, 1895	5 10	927.00	1,618.00	3	3	81	88.99
Sixteenth St.	Grand Ave.	Holmes St.	June 8, 1895	Nov. 30, 1895	5 23	3,820.00	6,924.27	4	4	175	244.48
Sixth St.	Main St.	Broadway	June 8, 1895	Nov. 30, 1895	5 23	1,534.00	2,559.24	3	3	32	113.91
Twelfth St.	Liberty St.	Bell St.	June 8, 1895	Nov. 30, 1895	5 28	1,352.00	2,344.05	4	4	56	104.51
Union Ave. complete	Bluff St. Bridge.	Hickory St.	May 6, 1895	Nov. 30, 1895	6 26	1,081.00	2,102.80	3	3	42	74.81
Vine St. complete	Eighteenth St.	Twenty-third St.	Mar. 1, 1895	Nov. 30, 1895	9 26	2,343.00	4,220.00	4	4	120	384.53
Virginia Ave. complete	Fourteenth St.	Fifteenth St.	Mar. 1, 1895	Nov. 30, 1895	9 25	2,118.00	4,408.00	4	4	252	625.86
Wyoming St. complete	Twelfth St.	Seventeenth St.	Mar. 1, 1895	Nov. 30, 1895	9 25	444.00	876.53	4	4	58	104.05
Wyoming St. complete	Ninth St.	St. Louis Ave.	Mar. 1, 1895	Nov. 30, 1895	9 25	2,407.00	4,570.00	4	4	252	595.73
Wyoming St.	Seventeenth St.	Liberty St.	May 2, 1895	Nov. 30, 1895	6 30	578.00	1,085.20	4	4	56	141.82
Wyandotte St.	Second St.	Ninth St.	June 21, 1895	Nov. 30, 1895	5 10	1,808.00	3,530.20	3	3	7	270.85
Walnut St.	Fourth St.	Thirteenth St.	June 21, 1895	Nov. 30, 1895	5 10	2,407.00	4,041.50	4	4	104	164.96
Wall St.	Seventh St.	Ninth St.	June 8, 1895	Nov. 30, 1895	5 23	3,900.00	6,843.36	3	3	196	306.24
						657.00	1,172.78	4	4	22	45.46
45 contracts.						99,172.50	174,668.99			5,721	611,289.86

**STREET PAVING CONTEMPLATED BY ORDINANCE AT CLOSE OF FISCAL YEAR
ENDING APRIL 20, 1896.—CONTINUED.**

BRICK.

Street.	From	To	Former Pavement.	Spaces between Brick.	Foundation.	Approximate Estimate.				Remarks.
						Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Total Cost.	
Baltimore Av S.	line 13th St.	N line 14th St.	None.	Cement Grouting	6 in. concrete, 2 in. sand.	445.30	1,822.00	\$1.52	\$ 2,951.64	Contract not confirmed.
Grand Ave. S.	line 3rd St.	N line 6th St.	Ced. Blk.	Cement Grouting	6 in. concrete, 2 in. sand.	340.00	2,306.00	1.27	2,945.12	Contract not confirmed.
Harrison St.	Tenth St.	12th St.	Ced. Blk.	Murphy Grouting	4 in. concrete, 2 in. sand.	838.50	3,410.00	1.53	5,217.30	Contract confirmed.
Jefferson St. S.	line 20th St.	N line S.W. corner of N line 24th St.	None.	Sand.	6 in. concrete, 2 in. sand.	1,269.20	4,150.00	1.54	6,391.00	Contract confirmed.
Oak St.	S line 10th St.	N line 8th St.	Ced. Blk.	Sand.	6 in. concrete, 2 in. sand.	999.36	3,432.00	1.50½	5,195.26	Contract not confirmed.
Summit St. S.	line 14th St.	N line 20th St.	None.	Sand.	6 in. concrete, 2 in. sand.	639.00	1,620.00	1.53	2,478.60	Contract not confirmed.
0.09 miles.						4,741.54	16,710.00		\$25,098.92	

**STREET PAVING CONTEMPLATED BY ORDINANCE AT CLOSE OF FISCAL YEAR
ENDING APRIL 20, 1896—CONTINUED.**

MACADAM.

Street.	From	To	Former Pavement.	Specifications.	Approximate Estimate.				Remarks.
					Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Total Cost.	
Bell'w Av	21st St.	24th St.	None.	1 in. screenings, 6 in. Beth. Falls limestone, 6 in. native stone.	1,284.90	4,397.00	\$0.59 $\frac{1}{2}$	\$ 2,572.25	Contract annulled.
Flora Ave.	S. line 19th St.	N. line 25th St.	None.	Brick margin, $\frac{3}{4}$ in. screenings, 6 in. Beth. Falls limestone, 6 in. native stone.	3,000.00	10,916.00	.66	7,652.36	Contract confirmed.
15th St.	W. line Virginia Ave.	E. l. Woodland Ave.	None.	6 in. native limestone, brick margin, 1 in. screenings, 6 in. Beth. Falls limestone.	1 817.71	12,871.00	.66 $\frac{3}{4}$	8,591.39	Contract confirmed.
15th St.	E. l. Woodland Ave.	East'n City limits.	None.	6 in. native limestone, 1 in. screenings, 6 in. Beth. Falls limestone.	6,414.27	44,692.00	.51	25,441.40	Contract confirmed.
Lydia Ave.	23rd St.	25th St.	None.	24 in. brick gutters, 4 in. Osage River gravel, 8 in. native limestone.	1,263.96	3,765.00	.89	3,350.85	Contract confirmed.
S.W. Boulevard	Belt Railway Bridge	State line.	Ced. Bk.	6 in. native limestone, 1 in. screenings, 6 in. Beth. Falls limestone.	4,890.00	28,000.00	.35	10,164.25	Contract confirmed.
6th St.	E. line Park Ave.	W. l. Prospect Ave.	None.	28 in. brick gutters, 8 in. native limestone, 4 in. Osage River gravel.	848.37	2,155.00	.88 $\frac{3}{4}$	1,904.48	Contract confirmed.
11th St.	Forest Ave.	Garfield Av	None.	6 $\frac{1}{2}$ in. native limestone, brick margin, $\frac{3}{4}$ in. screenings, 6 $\frac{1}{2}$ in. Beth. Falls limestone.	3,180.75	13,403.00	.71 $\frac{1}{2}$	9,588.15	Not confirmed.
19th St.	E. line Main St.	W. l. Olive St.	None.	6 in. bank gravel, 6 in. rock, 24 in. brick gutters.	8,039.00	23,585.00	1.00	23,585.00	Not confirmed.
5.08 miles.					30,428.96	143,784.00		\$91,049.13	

**PLANK SIDEWALKS CONTEMPLATED BY ORDINANCE AT CLOSE OF FISCAL YEAR
ENDING APRIL 20, 1896, AT NOON.**

Street.	Side.	From	To	Width, Feet.	Approximate Estimate.		
					Lineal Feet.	Price, Cents.	Cost.
Chestnut St.	West.	Twenty-fifth St.	Twenty-sixth St.	5	450.00	23 1/2	\$ 105.75
Delaware St.	West.	Front St.	Second St.	5	400.00	68	275.00
Eleventh St.	South.	Santa Fe St.	Mulberry St.	5	370.00	40	148.00
Eighteenth St.	South.	Summit St.	Madison Ave.	5	270.00	20	54.00
Madison Ave.	West.	North line Lott's Add'n.	North side Twenty-first St.	5	270.00	27.99	75.57
Madison Ave.	West.	Eighteenth St.	Twentieth St.	5	630.00	25	157.50
Madison Ave.	East.	Eighteenth St.	Twentieth St.	5	530.00	25	132.50
Oak St.	West.	Twenty-sixth St.	Twenty-seventh St.	5	Not let.		
Twelfth St.	South.	Santa Fe St.	Mulberry St.	5	384.00	35	134.40
Thirtieth St.	South.	Madison Ave.	Bellevue Ave.	5	270.00	38	102.60
Thirtieth St.	North.	Bellevue Ave.	Illinois Ave.	5	Not let.		
Wyandotte St.	West.	Twentieth St.	Milwaukee Ave.	5	600.00	22 1/2	135.00
10 contracts.	0.79 miles				4,174.00		\$1,317.32

**FIRST-CLASS SIDEWALKS CONTEMPLATED BY ORDINANCE AT CLOSE OF FISCAL
YEAR ENDING APRIL 20, 1896.**

Street.	Side.	From.	To	Width, Feet.	Approximate Estimate.				Material.
					Lineal Feet.	Square Feet.	Price per Foot.	Cost.	
Eighteenth St.....	North..	Tracy Ave.....	Lydia Ave.....	8	82.50	800.00	9c.	\$ 45.00	Brick.
Nineteenth St.....	South..	Tracy Ave.....	Virginia Ave.....	6	185.00	810.00	19c.	158.90	Art. sto. flag.
Fifth St.....	South..	Oak St.....	Locust St.....	6	316.60	1,900.00	17½c.	337.25	Art. sto. flag.
Fourteenth St.....	Both..	Wyandotte St.....	Broadway.....	6	183.34	800.00	18c.	144.00	Art. sto. flag.
Independence Ave.....	North..	Wairond Ave.....	Eastern City limits	6	1,083.38	6,500.00	7.08c.	507.00	Brick.
Locust St.....	West..	Missouri Ave.....	Fifth St.....	6	308.34	1,800.00	17½c.	324.38	Art. sto. flag.
Missouri Ave.....	North	Oak St.....	Locust St.....	6	316.60	1,900.00	17½c.	337.25	Art. sto. flag.
Thirteenth St.....	part of	Holmes St.....	Flora Ave.....	6	1,096.00	6,578.00	8½c.	567.09	Brick.
Washington St.....	West..	Eleventh St.....	Twelfth St.....	6	50.00	500.00	18c.	54.00	Natural stone.
9 contracts.		0.66 miles.			3,501.71	21,136.00		\$2,473.87	

**CURBING CONTEMPLATED BY ORDINANCE AT CLOSE OF FISCAL YEAR ENDING
APRIL 20, 1896.**

Street.	Side.	From.	To.	Thickness, Inches.	Approximate Estimate.	
					Lineal Feet.	Price per Ft. Amount.
Amit Street	Both	Wabash Avenue	Prospect Avenue	5	125.00	47 ¹ / ₂ c. 176.38
Bellevue Avenue	Both	Twenty-first Street	Twenty-fourth Street	5	1,300.00	151 ¹ / ₂ c. 591.50
Fifth Street	Both	Virginia Avenue	Eastern City Limits	5	9,900.00	45 ³ / ₄ c. 4,529.25
Jefferson Street	Both	Twentieth Street	Southwest Boulevard	5	2,000.00	49 c. 980.00
Kingsmith Street	Both	Tracy Avenue	Olive Street	5	7,300.00	47 c. 8,431.00
Sixth Street	Both	Park Avenue	Prospect Avenue	5	1,300.00	44 c. 575.50
Seventh Street	Both	Grand Avenue	Pennsylvania Avenue	5	1,750.00	42 ¹ / ₂ c. 718.18
Salmon Street	Both	Eighteenth Street	Twentieth Street	5	1,100.00	49 ¹ / ₂ c. 545.50
Twenty-eighth Street	Both	Locust Street	Holmes Street	5	450.00	42 ² / ₅ c. 190.40
Twentieth Street	Both	McGee Street	Oak Street	5	450.00	47 ¹ / ₂ c. 213.75
Walnut Street	Both	75 feet north of Second Street	Third Street	5	375.00	54 c. 202.50
11 Contracts.		4.99 Miles.			26,350.00	\$12,184.31

**PLANTING TREES AND SODDING CONTEMPLATED BY ORDINANCE AT CLOSE OF
FISCAL YEAR ENDING APRIL 20, 1896.**

Street.	Side.	From.	To.	Approximate Estimate			
				Kind of Trees.	Diameter.	Price Each.	Amount.
Garfield Avenue.....	Both.	Independence Avenue.	Pendleton Avenue.....	White Elm	12 Inches	\$ 6 00	\$ 180 00
				25			
						\$ 6 00	\$ 180 00

STREET GRADING UNDER CONTRACT AT CLOSE OF FISCAL YEAR ENDING AP. 20, 1896.

Street.	From.	To.	Linear Feet.	Approximate Estimate				Total Cost.
				Excava- tion.	Price, Cents.	Embank- ment.	Price, Cents.	
Lawton Place.....	Washington Street	Broadway Addition.....	271.00	451.00	25			\$ 112 75
McCoy Avenue.....	N. line Sec. 8, Twp. 49, R. 18	Twenty-fifth Street.....	1,280.00	6,474.00	10 1/2			\$ 720 72
Charlotte Street.....	Sixth Street	Seventh Street ..	800.00			4,968.00	17	\$ 847 11
3 Contracts.		.44 miles.	2,861.00	6,981.00		4,968 10		\$ 1,009 68

Between	From	To	Length, Feet.	Approximate Estimate.			
				Cubic Yards Earth.		Rock.	Amount.
				Excavation.	Price, Cents.		
Washington St. and Broadway Addition... Sixteenth St..... Seventeenth St.....			857.00	1,290.00	10	410.00	\$323.75
1 contract.			857.00	1,290.00		410.00	\$323.75

Sewer	(Ordinance Number.	Approximate Estimate.												Cost.								
		Pipe Sewer.		Brick Sewer		Cast Iron.		Masonry.		Man-holes.	Concrete.		Lumber.									
		Lineal Feet.	Price.	Lineal Feet.	Price.	Lineal Feet.	Price.	Lineal Feet.	Price.		Brick.	Rubble.			Native Cement.	Port-land Cement.	Feet B. M.	Price per 1,000				
O K Creek Intercepting	7,140	2-6 75c.	90	\$1.23	2,842	\$5.10	700	3c.	600	60c.	430	\$3.00	6	\$25.00	5.00	\$3.50	5.00	\$7.00	15,000	\$18.00	3,218	\$16,919.70

DISTRICT SEWERS UNDER CONTRACT AT CLOSE OF FISCAL YEAR ENDING AP. 20, 1896.

District Number.	Ordinance Number.	APPROXIMATE ESTIMATE.											
		Catch Basin Connect'ns.				Pipe Sewers.							
		10 Inch.	12 Inch.	6 Inch.	8 Inch.	10 Inch.	12 Inch.	15 Inch.	18 Inch.	21 Inch.			
		Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.
	Joint, 53-54-55-56-57-58-59	78	45c	308.5	50c								
	Joint, 164-168-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000	78	3208.5	50	341	4,221	4,950	2,025	665	1481 4-10			
	3 Contracts.	78	3208.5	50	341	4,221	4,950	2,025	665	1481 4-10			

District Number.	Ordinance Number.	APPROXIMATE ESTIMATE.											
		Brick Sewers.											
		24 inch.	28 Inch.	30 Inch.	32 Inch.	36 Inch.	38 Inch.	40 Inch.	42 Inch.	44 Inch.			
		Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.	Lin'l Feet.	Price per Ft.
	Joint, 53-54-55-56-57-58-59												
	Joint, 164-168-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000	172	942	165.2	194	242	278	571	1,300	600			
	3 Contracts.	172	942	165.2	194	242	278	571	1,327	600			

STATEMENT OF CONDEMNATION CASES FOR FISCAL YEAR ENDING APL. 20, 1896.

Ordinance. No.	Date Approved	Street or Alley.	From	To	Verdict Rendered.		Benefits.		Status of Case.
					Mayor's Court	Circuit Court.	Kansas City.	Property Owners	
3,610	Oct. 12, '91	Main St.	Twenty-fourth St.	W line Grand Ave.	Nov. 27, '93	Dec. 9, '92	1.00	\$16,855.00	Collecting.
5,265	June 3, '93	Twenty-fifth St.	Holly St.	S. W. Boulevard	Nov. 27, '93	April 27, '95	1.00	7,003.00	Appealed.
5,351	Aug. 28, '94	Eleventh St.	South Winfield Place.	Agnes Ave.	Feb. 9, '95		1.00	5,999.00	Complete.
5,989	Sept 13, '94	bet. Thirteenth and Fourteenth St.	East line of Matthews & Hill's Add.	Wabash Ave.	April 12, '95		1.00	959.00	Collecting.
6,076	Nov. 14, '91	Minnie St.	South line of Carleton Place Add.	Olive St.	July 20, '95		1.00	1,749.00	Appealed.
6,077	Nov. 14, '91	Bales Ave.	Bellefontaine Ave.	Askew Ave.	Sept. 7, '95		1.00	1,499.00	Ord 6,338.
6,214	Mar. 6, '95	Alley N. of Fifteenth St.	South line of Bernard Place Add.	Fifteenth St.	Jan. 28, '96		1.00	2,184.00	Collecting.
6,215	Mar. 6, '95	Walrond Ave.	St. John Ave.	Smart Ave.			1.00	1,314.00	Pending.
6,229	Mar. 16, '95	Monroe Ave.	Liberty St.	Holly St.					No proceed- ings; dead.
6,262	April 13, '95	Seventeenth St.	Highland Ave.	Alley E. of Highland Ave.	Aug. 5, '95		1.00	299.00	Collecting.
6,213	Mar. 6, '95	Alley N. of Tenth St.	Turner & Co.'s Ad.	W line Block 6, Coates & Hopkins 2nd Add.	Oct 29, '95		1.00	6,461.00	Appeal'd to Circuit Ct.
6,294	April 13, '95	Alley bet. St. Louis and Union Aves	A point 47.65 feet north of Tenth St.	Tenth St.	Nov. 9, '95		139.15	2,860.85	Appeal'd to Circuit Ct.
6,321	April 29, '95	Main St.	Campbell St.	Alley E. of Campbell St.					No proceed- ing; dead.
6,352	May 9, '95	Alley S. of Seventeenth St.	Bellefontaine Ave.	Askew Ave.	Nov. 21, '95			1,740.42	Collecting.
6,353	May 9, '95	Alley N. of Fifteenth St.	Twenty second St.	Twenty-third St.	Nov. '95		1.00	426.00	Collecting.
6,354	May 9, '95	Alley bet. Holmes and Charlotte Sts.	Locust St.	E. line of W. 1/4 of S. E. 1/4 Sec. 8, T. 49, R. 33.	Dec 12, '95		1.00	8,380.70	Appeal'd to Circuit Ct.
6,388	May 15, '95	Twenty-fourth St.	Laurel Ave.	Highland Ave. etc.	Jan. 30, '96		1.00	1,624.00	Appeal'd to Circuit Ct.
6,546	July 2, '95	Fifth St.	N. line of S. 1/4 Sec. 27.	S. line of N. 1/4 of S. W. 1/4 Sec. 27.	Mar. 25, '96		1.00	1,099.00	Pending
6,695	Aug. 26, '95	Duncan Ave.	Town. 20, K. 33	66 ft. S. of N. line Lot 20					Ap. 21, '96, jury empanel'd
6,966	Nov. 21, '95	Grand Ave.	Twenty-sixth St.	Scarritt & Perry's Sub					Ap. 25, '96, jury empanel'd
7,028	Dec. 6, '95	Alley bet. Euclid and Garfield Aves.	S. line of Geo. J. Jack- son's Sub.	Alley immediately N. of Eighteenth St.					Pending.
7,160	Feb. 10, '96	Thirry-first St.	Brooklyn Ave.	Prospect Ave.					Pending.
7,198	Mar. 7, '96	Alley bet Chestnut and Kansas Ave.	Twenty-third St.	Twenty-fifth St.					Pending.
7,202	Mar. 7, '96	Alley bet Chestnut and Kansas Ave	Twenty-sixth St.	Twenty-seventh St.					Pending.

•Mayor's Court

STATEMENT OF GRADING CASES FOR FISCAL YEAR ENDING APRIL 20, 1896.

Ordinance.	No.	Date Approved.	Street or Alley	From	To	Date of Trial.	Damages		Remarks.
							Kansas City	Property Owners	
5,474	Nov. 6, 1893	Ord St.	Elma St.	Woodland Ave.	Lexington Ave.	Oct. 27, '94			Pending.
6,117	June 16, 1895	Twenty-fifth St.	Woodland Ave.	Prospect Ave.	Prospect Ave.	June 1, '95			Repealed.
6,192	Feb. 28, 1893	College Ave.	Fourth St.	Fourth St.	Fifteenth St.	June 1, '95			Complete.
6,204	March 6, 1895	Alley bet Terrace Ave. and Mercer St.	Twenty-ninth St.	Twenty-ninth St.	Thirtieth St.	June 1, '95			Complete.
5,983	Sept. 13, 1894	Alley bet W. Prospect Pl and Bellevue Ave.	Twenty-ninth St.	Twenty-ninth St.	Thirtieth St.				Dead.
6,084	Nov. 21, 1894	Alley bet Eleventh St. and Perry Ave.	Walrond Ave.	Walrond Ave.	Indiana Ave.				Repealed.
6,045	Nov. 21, 1894	Alley bet Jefferson St. and Pennsylvania Ave.	Twenty-sixth St.	Twenty-sixth St.	Jefferson St.	June 23, '95			Repealed.
5,328	May 26, 1893	Villa St.	Pennsylvania Ave.	Pennsylvania Ave.	Jefferson St.	April 16, '94		\$2,000.00	New trial.
5,471	Nov. 26, 1893	Alley bet Park Ave. and Olive St.	Pendleton Ave.	Pendleton Ave.	St. John Ave.	Feb. 2, '95		513 25	Complete.
5,349	May 31, 1893	Alley bet Grand Ave. and McGee St.	Thirtieth St.	Thirtieth St.	Fourteenth St.				Repealed.
5,371	June 15, 1894	Alley bet Holly St. and W. Prospect Pl	Twenty-ninth St.	Twenty-ninth St.	Thirtieth St.				Repealed.
5,473	Nov. 6, 1894	Twenty-ninth St.	Grand Ave.	Grand Ave.	Holmes St.				Pending.
5,531	Jan. 27, 1894	Montgall Ave.	Fifteenth St.	Fifteenth St.	Eighteenth St.				Pending.
5,730	April 12, 1894	Brooklyn Ave.	Amie St.	Amie St.	Lexington Ave.	Dec. 5, '94		200 00	Complete.
6,112	Dec. 12, 1894	Alley bet Cherry St. and Holmes St.	Twelfth St.	Twelfth St.	Thirteenth St.				Repealed.
6,145	Jan. 16, 1895	Mercier Pl.	N. line Lot 26, Blk. 2, Res. Whipple's 2nd Ad. prod.	N. line Lot 26, Blk. 2, Res. Whipple's 2nd Ad. prod.	Cliff St.				Repealed.
6,146	Jan. 16, 1895	Eighteenth St.	Whipple's 2nd Ad. prod.	Whipple's 2nd Ad. prod.	Holly St.	Jan. 2, '95		300 00	Pending.
6,193	Feb. 28, 1895	College Ave.	Twenty-fourth St.	Twenty-fourth St.	Twenty-sixth St.	June 24, '95			Complete.
6,194	Feb. 28, 1895	Indiana Ave.	Forest Ave.	Forest Ave.	Tracy Ave.	June 10, '95			Appealed to Sup. Ct.
6,207	March 6, 1895	Alley bet S. of 14th St. and W. Prospect Pl	Twenty-seventh St.	Twenty-seventh St.	Twenty-eighth St.	Nov. 9, '95			Complete.
6,209	March 6, 1895	Holly St.	Twenty-third St.	Twenty-third St.	Twenty-fourth St.	June 15, '95			Complete.
6,210	March 6, 1895	Charlotte St.	Sixth St.	Sixth St.	Ninth St.	June 15, '95			Complete.
6,211	March 6, 1895	Twenty-first St.	Charlotte St.	Charlotte St.	Campbell St.	June 24, '95		250 00	Complete.
6,212	March 6, 1895	Twelfth St.	Walrond Ave.	Walrond Ave.	Indiana Ave.	July 12, '95			Complete.
6,325	April 26, 1895	Alley bet Mercer St. and Holly St.	Twenty-eighth St.	Twenty-eighth St.	Twenty-ninth St.	July 20, '95			Damages exceed benefits.
						Aug. 8, '95			Complete.

STATEMENT OF GRADING CASES FOR FISCAL YEAR ENDING APRIL 20, 1896—

CONTINUED

Ordinance. No.	Date Approved.	Street or Alley.	From	To	Date of Trial.	Damages.		Remarks.
						Kansas City.	Property Owners.	
6,328	April 26, 1895	Alley bet. S. of 16th St.	Jefferson St.	Pennsylvania Ave.	Aug. 10, '95	.....	.....	Complete.
6,331	May 9, 1895	Twenty-fifth St.	Holmes St.	Charlotte St.	Nov. 9, '95	.....	.....	Pending.
6,410	May 23, 1895	Mercier St.	Twenty-ninth St.	Thirtieth St.	.....	.....	.....	Complete.
6,411	May 23, 1895	Alley bet. Holly St. and W. Prospect Pl.	Twenty-ninth St.	Thirtieth St.	Aug. 8, '95	.....	.....	Complete.
6,421	June 1, 1895	McCoy Ave.	N. line of S. ½ Sec. 8, Town. 49, Range 33.	Twenty-fifth St.	Aug. 10, '95	.....	.....	Contractor injured. Complete.
6,422	June 1, 1895	Alley bet. Washington St. and Broadway	Sixteenth St.	Seventeenth St.	Nov. 23, '95	.....	.....	Complete.
6,450	June 6, 1895	Alley bet. Locust St. and Cherry St.	Eight St.	Ninth St.	Aug. 8, '95	.....	\$ 0.10	Complete.
6,537	July 2, 1895	Alley bet. Grand Ave. and McCoe St.	Thirteenth St.	Fourteenth St.	Jan. 3, '96	.....	537.50	Pending.
6,564	July 2, 1895	Alley bet. Park Ave. and Olive St.	Sixth St.	Eighth St.	Feb. 3, '96	.....	94.00	New trial Apl. 27, '96.
6,607	Aug. 8, 1895	Alley bet. Woodland Ave. and Michigan Ave.	Alley S. of Ninth St.	Tenth St.	April 18, '96	.....	.....	Pending.
6,608	Aug. 8, 1895	Park Ave.	Twenty-first St.	Twenty-seventh St.	May 2, '96	.....	.....	Pending.
6,609	Aug. 8, 1895	Alley bet. 10th and 11th Sts.	Olive St.	Prospect Ave.	Jan. 18, '96	.....	125.00	New trial Apl. 27, '96.
6,654	Aug. 16, 1895	Alley bet. N. of 15th St.	Park Ave.	Olive St.	Feb. 3, '96	.....	94.00	Pending.
6,692	Aug. 26, 1895	Tenth St.	Grand Ave.	Locust St.	.....	.....	.....	.....
6,713	Sept. 3, 1895	Mercier Pl.	Prolongation N. line Lot 26, Blk. 2, Res. Whipple's 2nd	Cliff St.	Jan. 2, '96	.....	871.00	Pending.
6,842	Oct. 21, 1895	Bellevue Ave.	Seventeenth St.	Twenty-first St.	April 2, '96	.....	.....	Damages exceed benefits.
6,853	Oct. 17, 1895	Thirtieth St.	Baltimore Ave.	Main St.	.....	.....	.....	Pending.
6,863	Oct. 18, 1895	Alley bet. Pennsylvania Av. and Washington St.	Thirteenth St.	N. line of corrected Plat Robert's Ad.	.....	.....	.....	Pending.
6,923	Oct. 31, 1895	Lawton Pl.	Washington St.	Broadway Ad.	Feb. 3, '96	.....	.....	Complete.
6,892	Nov. 21, 1895	Alley bet. S. of 19th St.	Olive St.	Wabash Ave.	.....	.....	.....	Repealed.
6,893	Oct. 23, 1895	Twenty-ninth St.	Main St.	Broadway.	.....	.....	.....	Pending.
6,894	Oct. 23, 1895	Central St.	Tenth St.	Eleventh St.	.....	.....	.....	Repealed.
6,895	Oct. 23, 1895	Alley bet. Charlotte St. and Campbell St.	Fifteenth St.	Sixteenth St.	March 4, '96	.....	165.00	Pending.
6,943	Dec 6, 1895	Alley bet. Wyandotte St. and Baltimore Ave.	805 ft. S. of Thirtieth St.	South'y City limits	Unani-	.....	Petition.	Complete.

STATEMENT OF GRADING CASES FOR FISCAL YEAR ENDING APRIL 20, 1896—

CONTINUED.

Ordinance. No.	Date Approved.	Street or Alley.	From	To	Date of Trial.	Damages Kansas City.	Property Owners.	Remarks.
6 977	Nov. 21, 1895	Alley running S. of 13th St.	Wabash Ave.	Prospect Ave.				Pending.
6 978	Nov. 21, 1895	Alley bet. Forest and Tracy Aves.	Lot 115 Hurok's Sub. of Guil- notte Bluff.	Alley N. of Inde- pendence Ave.				Pending.
6 980	Nov. 21, 1895	Alley bet. Park Ave. and Twentieth St.	Twentieth St.	Twenty-first St.	Mar. 4, '96			Complete.
6 979	Nov. 21, 1895	Alley bet. Harrison and Thirteenth St.	Thirteenth St.	Fourteenth St.	Mar. 30, '96			Complete.
6 981	Nov. 21, 1895	Alley bet. Twentieth St. and Walrond Ave.	Walrond Ave.	College Ave.	April 10, '96	\$85.00		Pending.
6 982	Nov. 21, 1895	Alley running S. of 14th St.	Olive St.	Wabash Ave.	Mar. '96			Pending.
7 017	Dec. 6, 1895	Merrill Pl.	W. line of Blk. 3 Winter Pl.	Holly St.				Pending.
7 023	Dec. 6, 1895	Woodland Ave.	A point 300 ft. S. of 30th St.	South'n City limits	Mar. '96			Complete.
7 024	Dec. 6, 1895	Merrill St.	Merrill Pl.	Twenty-ninth St.				Pending.
7 045	Dec. 9, 1895	Alley bet. Euclid and Gar- field Aves.	Fourteenth St.	13 ft. N. of 13th St.				Complete.
7 151	Feb. 10, 1896	Grove St.	Twenty-third St.	Twenty-fourth St.				Pending.
7 152	Feb. 10, 1896	Holly St.	Twenty-fourth St.	Twenty-fifth St.				Pending.
7 153	Feb. 10, 1896	Alley bet. Main and Wal- rond Aves.	Independence Boulevard.	Independence Ave.				Pending.
7 154	Feb. 10, 1896	Alley bet. Main and Wal- rond Aves.	Alley S. of Thirtieth St.	Thirty-first St.				Pending.
7 155	Feb. 10, 1896	Alley bet. Roberts St. and Independence Ave.	Indiana Ave.	Bales Ave.				Pending.
7 156	Feb. 10, 1896	Roberts St.	Indiana Ave.	Bales Ave.				Pending.
7 199	Mar. 7, 1896	Lexington Ave.	Indiana Ave.	Bales Ave.				Pending.
7 207	Mar. 7, 1896	Grove St.	Twenty-second St.	Twenty-third St.				Pending.
7 213	Mar. 23, 1896	Prospect Ave.	15 ft. S. of center of K. C. belt Ry.	Twenty-third St.				Pending.
7 212	Mar. 23, 1896	Prospect Ave.	Twenty-second St.	Twenty-second St.				Pending.
7 253	Mar. 26, 1896	Thompson Ave.	Bellevue Ave.	Walrond Ave.				Pending.

**STATEMENT OF EXPENDITURES OF ENGINEERING DEPARTMENT
DURING FISCAL YEAR ENDING APRIL 20, 1896.**

PAY ROLL		
Engineering Department, Salaries.....	\$43,605.26	
Engineering Department, Horse Hire.....	1,277.51	
Steam Road Rollers.....	1,769.51	\$46,652.28
MISCELLANEOUS EXPENSE—		
Abstracts, Condemnations.....	312.48	
Abstracts, Grading.....	\$47.31	
Abstracts, General Information.....	49.20	
Blue Prints.....	71.04	\$943.03
SUNDRY MISCELLANEOUS EXPENSE		
1 of Testing Brick, Use of Rattler at Foundry.....	12.25	
To Grace Robertson and F. F. Wyatt, Services with Typewriter.....	4.50	20.75
		\$47,656.06

Respectfully,
H. H. FILLEY,
City Engineer.

SEVENTH ANNUAL REPORT
— OF THE —
DEPARTMENT OF STREETS,
KANSAS CITY, MISSOURI,
— TO THE —
BOARD OF PUBLIC WORKS,
— FOR THE —
FISCAL YEAR ENDING APRIL 20, 1896.

THOS. A. DODDS, *Superintendent.*

J. W. HUMPHREY, *Chief Clerk.*

KANSAS CITY, MO., April 20, 1896.
To the Honorable Board of Public Works,
Kansas City, Mo.

GENTLEMEN:—I have the honor to submit herewith my report of the operations of the Street Department for the fiscal year ending April 20, 1896.

TOM A. DODDS,
Superintendent of Streets.

SUMMARY.

PAY ROLLS AND ACCOUNTS.	Totals.	Totals.
Pay roll from April 16 to 30, 1895.....	\$3,267.71	
Accounts paid from April 16 to 30, 1895.....	1,111.01	\$ 4,378.72
Pay roll for month of May, 1895.....	5,757.47	
Accounts paid month of May, 1895.....	1,245.25	7,002.72
Pay roll for month of June, 1895.....	5,876.40	
Accounts paid month of June, 1895.....	762.15	6,638.55
Pay roll for month of July, 1895.....	8,364.76	
Accounts paid month of July, 1895.....	1,070.87	9,435.63
Pay roll for month of August, 1895.....	6,138.80	
Accounts paid month of August, 1895.....	1,211.85	7,350.65
Pay roll for month of September, 1895.....	7,378.08	
Accounts paid month of September, 1895.....	1,124.29	8,502.37
Pay roll for month of October, 1895.....	7,635.39	
Accounts paid month of October, 1895.....	952.50	8,587.89
Pay roll for month of November, 1895.....	5,022.59	
Accounts paid month of November, 1895.....	1,782.84	6,805.43
Pay roll for month of December, 1895.....	5,394.18	
Accounts paid month of December, 1895.....	754.57	6,148.75
Pay roll for month of January, 1896.....	6,204.76	
Accounts paid month of January, 1896.....	1,104.77	7,309.53
Pay roll for month of February, 1896.....	3,222.74	
Accounts paid month of February, 1896.....	718.78	3,941.52
Pay roll for month of March, 1896.....	3,296.80	
Accounts paid month of March, 1896.....	837.67	4,134.47
Pay roll for month of April, 1-20, 1896.....	1,332.35	
Accounts paid month of April, 1-20, 1896.....	—	1,332.35
Total expense, April 16, 1895, to April 20, 1896.....		\$81,568.58
Estimated value of material on hand, April 16, 1895.....		4,253.29
Total expense and material.....		\$85,821.87

MISCELLANEOUS EXPENSE.

Month.	Salaries of Supt and Clerks	Salaries of Inspectors	Maintenance of Horses.	New Tools.	Repairing Tools.	Sprinkling	Rent of Telephone	Sundries.	Totals.
April 16th to 30th, 1893	• 146.33	• 150.00	• 41.00	• 105.50	• 101.80	• 270.00		• 10.45	• 825.08
May, 1893	256.66	305.00	78.00	12.65	147.50	454.00		15.95	1,299.76
June, 1893	316.66	295.00	74.00	97.45	113.00	32.00	• 18.00	7.18	943.29
July, 1893	316.66	305.00	91.50	70.90	180.85	22.00		149.23	1,156.14
August, 1893	316.66	283.75	76.00	718.22	17.25	22.00			1,483.84
September, 1893	316.66	307.50	82.60	25.40	209.40	20.00	18.00	7.96	987.52
October, 1893	316.66	305.00	81.50	106.10	82.50			5.00	896.76
November, 1893	316.66	267.50	76.50	690.98	88.60			63.80	1,504.04
December, 1893	316.66	177.50	82.25	161.40	9.60			15.65	763.46
January, 1894	316.66	263.75	78.00	116.05	101.05			27.86	902.47
February, 1894	316.66	150.00	62.50	38.38	100.55			45.48	714.17
March, 1894	316.66	150.00	66.00	8.56	74.60			42.70	638.52
April 1st to 30th, 1894	210.83	100.00							310.83
Totals.	\$3,810.42	\$3,060.00	\$89.45	\$2,152.59	\$1,236.70	\$810.00	\$36.00	\$390.76	\$12,376.32

Total Miscellaneous Expense from April 16th, 1893, to April 20th, 1896.

WORK DISTRIBUTED ON STREETS.

Date.	Street.	Cleaning.		Paved Streets.		Dirt and Macadam Streets.		Sewer Maintenance.		Crosswalks.		Sidewalks.		Bridges.		Miscellaneous.		Total Expense.
		No. Loads Removed	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	
1895	Agnes Ave.																	112.88
April 16	Allen																	162.74
1896	Anderson																	9.21
April 20	Amie																	82.71
	Askev.																	1.68
	Bates Ave.																	177.93
	Baltimore.	115 1/2	\$ 235.39		\$ 0.60													221.27
	Bell.	22	31.88															412.40
	Bellevue.	42 1/2	109.77															54.58
	Bellevue.	38	76.52															308.91
	Bluff	305 1/2	374.11															162.11
	Brooklyn	226	413.31															8.87
	Brooklyn	95 1/2	205.92															706.41
	Brownell																	27.74
	Brownell																	397.19
	Brownell																	3.40
	Central.	51 1/2	104.59															204.08
	Charlotte.	75	152.17															205.10
	Cherry.	12	91.24															268.98
	Chestnut.	185 1/2	342.25															352.42
	Cleveland.																	100.36
	Cliff.																	21.01
	College.																	1.77
	Cottage.																	83.42
	Cutter.																	15.28
	Delaware.																	1.89
	Dora	280	800.38															838.98
	Dunham																	6.40
	18th.	905 1/2	1,190.16															1,466.27
	210 1/2	689.17	7.29															826.89
	11th.	514	1,110.91															1,422.86
	Elma																	24.57
	Euclid																	128.22
	Fairm't Av.																	67.37
Totals forward		3,419	\$5,914.27	\$48.84	\$263.96	\$32.20	\$541.51	\$169.59	\$765.38	\$199.52	\$484.99	\$40.25	\$94.20	\$258.96	\$177.57	\$3.63	\$25.14	\$9,835.96

WORK DISTRIBUTED ON STREETS--CONTINUED.

Date	Street	Cleaning.		Paved Streets.		Dirt and Macadam Streets.		Sewer Maintenance.		Crosstalks.		Sidewalks.		Bridges.		Miscellaneous.		Total Expense.
		No. Loads Removed	Costs.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	
1895	T. is forward	3,419	\$ 5,918.27	\$ 19.84	\$ 265.96	\$ 52.20	\$ 541.51	\$ 169.59	\$ 765.33	\$ 469.52	\$ 184.99	\$ 40.25	\$ 91.30	\$ 253.96	\$ 177.57	\$ 3.63	\$ 25.14	\$ 333.96
April 16	Feb	128	255.75	1.27	12.99	28.35	189.18	50.70	167.62	21.00	32.49	3.44	4.82	1.17	3.47	3.07	18.42	833.04
April 16	to 30	136	899.78	22.72	131.95	31.33	210.61	3.15	92.78	6.15	3.29						73	1,324.01
1896	Feb	128	163.46	8.32			3.13		92.78	6.15	3.29							192.52
April 20	Forest	26	70.77				9.06	3.03	17.19	21.81	18.34	12	1.79					145.11
Forest		266 1/2	356.02	60	186.00	304.02	304.02	26.00	12.08	6.49								885.21
14th		363 1/2	679.02		5.40	66.63	36.14	211.12	31.13	31.13								1,095.26
14th		353 1/2	840.18	2.80	53.90	96	16.07	1.00	65.10	23.16	30.87			10.43	41.60	.04	1.68	1,095.01
Franklin														25	6.05			6.30
Franklin		79	208.84		3.15		8.50	7.98	27.01	19.04	16.32							298.12
Garfield Av											1.90							1.96
Garfield											8.36							11.28
Garner		25 1/2	34.57				1.19		1.32	11.45	8.83							57.86
Gillis		31 1/2	34.74	6.10	9.25		3.36											53.45
Gladstone																		58.40
Grand		926 1/2	1,104.88	22.25	197.71		1.19	5.80	19.14	16.25	18.02			21.86	23.40		1.50	2,051.21
Grand											5.04							5.04
Grove											8.60							18.40
Grove		12	19.21		14.15		13.50		19.14	29.44	7.12							69.20
Guionette		11	87.60	1.12	10.13		140.86	.70	3.39									236.13
Harrison		3 1/2	456.97						4.09	37.90	32.40			27.69	5.53			396.46
Hickory		22 1/2	65.36		44		15.14	17.86	32.31	11.35	16.37			12	3.47			527.61
Hickory		22 1/2	65.36				7.88	3.10	6.64	9.05	9.45			96	3.34			126.75
Hickory		203	366.87	366.45	982.96		1.14	12.80	43.57	7.35	4.93			53	3.36			95.71
Hickory							18.71	14.90	16.00	60.27	12.74							1,779.96
Howard							1.35	144.70	229.92	11.32	15.08							132.62
Indiana		237 1/2	357.01	2.95	11.99		5.40	100.13	15.35	108.43	57.88			2.80	13.49	1.25	1.68	777.28
Indiana																		833.48
James St V		55 1/2	114.21		1.20		5.09	15.91	57.13	7.02	10.28			21	8.13			252.86
James St V		17	29.61											1.22	10.05			29.63
James St V		1	4.90															146.31
Kansas Ave		7 1/2	20.22				82.29		32.26	26.04								136.64
Lexington		101	106.10				4.17	35.68	39.74	6.96	11.63			.56	1.88			1,121.83
Liberty		5	15.25				354.51		6.67	11.96	8.35			.80	3.78			50.70
Liberty		137	315.26	60	7.03		11.39		10.66			1.08				3.32	5.02	417.84
Locust							2.39		5.88	53.88	41.94							
Totals forward		7,264	913,291.75	6,695.00	61,515.13	6,678.40	62,312.27	6518.69	62,038.77	61,047.10	61,043.89	678.66	6145.41	6256.40	6277.05	611.51	660.85	624,001.48

WORK DISTRIBUTED ON STREETS—CONTINUED.

Date.	Street.	Cleaning.		Paved Streets.		Dirt and Macadam Streets.		Sewer Maintenance		Crosswalks.		Sidewalks.		Bridges.		Miscellaneous.		Total Expense.
		No. Loads Removed	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.			
1895	T'ls forw'd.	7,264	\$13,291.75	\$195.10	\$1,715.13	\$ 678.60	\$2,312.27	\$518.69	\$2,038.77	\$1,017.10	\$1,003.89	\$78.66	\$113.41	\$296.40	\$277.03	\$ 11.51	\$ 60.83	\$24,001.18
April 16	Lydia	42	78.08	1.20	1.80		15.34		20.19	33.01	33.31		71	15.86				199.56
to	Madison Av	22	36.56				7.5	23.35	45.45	13.36	11.72			32.04	35.67	12.22		201.12
1896	Main	621	1,427.60	.90	1.47		13.40	6.80	113.08									1,563.22
April 20	Maple						7.40		.60									8.00
	Matthews									12.13	8.38							20.51
May	May	13½	33.09				1.19											34.28
	Mercer						2.38		8.72	12.14	11.71							30.25
Michigan	Michigan	24½	62.63				5.63		2.64	22.21	19.98							113.09
Mill	Mill	2½	7.06															7.06
	Minnie						2.70	5.26	15.91	12.76	6.68							43.31
	Misc'l's Sts	125	2,343.94				39.61		73.24		57.96					38.84		3,152.67
	Misouri	117	376.06				690.90	6.00	53.73	13.10	14.97					60		1,590.65
	Montcal	10	18.21				5.04		1.69	28.70	20.69			12	1.68			76.13
	Morrill						26.38			.46	1.68							24.52
	Mulberry	211	365.60				1.80		10.31									430.15
	McGee	141	256.51				6.29		4.99	.12	5.03							272.94
	Nicholson						9.15											9.15
10th	10th	47½	84.10	2.18	16.65	1.80	5.52	67.80	133.25	21.89	10.96							352.15
9th	9th	692½	1,441.96	2.40	32.48	57.60	115.05	33.68	217.86	28.18	18.97	1.51	10.39			.80	2.19	1,906.07
Oak	Oak	68	153.21				.60	5.05	25.58	13.63	11.07							212.68
Oliver	Oliver	206	446.00					7.66	49.93	36.03	38.28			.30	3.58			596.53
Pacific	Pacific								28.40	25.20	15.43	6.99	26.76			337.60	737.94	1,178.32
Park	Park	105	183.30	.07	7.91	1.90	17.91		16.63	16.46	16.62							270.70
Peery	Peery	11½	36.72				12.99		1.33	32.13	23.43							106.32
Pendleton	Pendleton	11½	32.30	1.51	17.73		5.82	2.61	3.20	12.84	8.19							86.50
Pennsylvania	Pennsylvania	94	164.25				1.19		24.32	31.14	17.10	2.21	5.01	15.30	38.01			292.46
Pine	Pine								1.23									1.23
Prospect	Prospect	89½	177.82	1.04	7.10	19.40	79.38	23.63	39.11	44.91	28.14			.08	1.06	.02	1.04	424.39
Robert	Robert								2.89	.12	3.36							6.37
Robert	Robert																	13.06
Rochester	Rochester									6.71	8.84							15.55
Salisbury	Salisbury						6.75			6.32	4.38							17.43
Santa Fe	Santa Fe	144	363.20															263.20
Scarritt	Scarritt						5.94	1.13	12.09	.06	1.68							21.80
Totals forward		10,093	\$21,292.62	\$517.95	\$1,849.22	\$1,246.83	\$3,421.28	\$701.66	\$2,919.38	\$1,171.21	\$1,034.10	\$90.08	\$203.15	\$834.11	\$317.67	\$310.93	\$841.36	\$37,593.92

WORK DISTRIBUTED ON STREETS.—CONTINUED.

Date	Street.	Cleaning.			Paved Streets.			Dirt and Macadam Streets.			Crosswalks.			Sidewalks.			Bridges.			Miscellaneous.			Total Expense.
		No. Loads Removed	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.				
1895.	T. H. forward.	40,093	\$21,292.62	\$517.95	\$1,889.22	\$1,246.83	\$3,121.28	\$701.66	\$2,919.38	\$1,471.24	\$1,934.10	\$90.08	\$261.46	\$314.11	\$317.67	\$349.93	\$844.36	\$37,593.92					
April 16 2nd	to 17th	187 1/2	357.69	31.50	77.95	300.20	411.36	3.10	19.14	38.17	31.65	1.69	26.96			.21	3.34						
1896.	1st	211	475.49	15.45	21.15	94.20	384.88	15.30	104.17	1.08	1.16												
April 20 Shawnee.		6	5.78																				
10th		115 1/2	28.13	38	7.33	20.25	187.98	10.96	187.98	38.14	52.61												
10th		333	683.08	11.33	40.08	518.34	104.00	9.90	104.00	19.56	16.32	1.55	8.16										
Smart.																							
Southw 8th		620 1/2	388.31	.45	2.69		30.15	1.20	14.18	27.99				2.79	16.12								
State		5 1/2	10.16																				
Summit		53 1/2	122.85		1.29		22.20	33.72	23.01	4.92	6.94			.12	8.56								
St John Av		78 1/2	118.89					5.82	25.70														
St Louis.		61	71.21	25	10.33	5.82																	
10th		247 1/2	543.85	8.96	24.09		273.71		23.03	13.81	15.79	1.84	3.12	14	8.36								
Terrace.																							
3rd.		285	430.01	2.50	14.32		15.68	39.63	232.28	64.28	52.93	38	1.60										
1st		295 1/2	589.20	3.68	16.34		13.81	8.58	13.81	46.94	36.15												
10th																							
East		31	70.83				45.38	3.82	8.58	12.19	8.36	.59	1.90										
Thompson																							
1st		50	162.11		3.13		1.68		115.51	6.98	8.18												
Town		105 1/2	225.42	1.13	103.98	85	7.00	118.67	124.36	7.93	5.02												
1st		1,121 1/2	2,205.43	20.08	266.82	90	2.07	1.30	216.62	7.13	4.81	2.22	22.40	12	5.03	7.55	8.75						
2nd		317 1/2	62.32	2.70	35.37	1.96	41.98	3.40	19.69	22.14	17.46	25.04	16.97	1.44	5.24	.50	1.68						
2nd																							
2nd		51	31.99		2.15	1.50	13.09	9.06	40.26	67.50	67.12			38.97	95.81								
2nd		7	16.03		.60		8.81	60.17	231.74	55.70	18.81	2.06	6.61										
2nd		110 1/2	117.14			30	3.86	4.75	9.02	37.72	44.30	5.4	1.90	3.35	8.34								
2nd																							
2nd																							
2nd		49 1/2	38.18				10.30	6.56	46.82	51.61				139.33	67.85								
2nd							42.13	23.19	18.22	7.11	17.24			22.21	35.44	.04	1.46						
2nd							5.10		4.92	62.81	76.04			79	1.68								
Union Ave		4	2.89				25.06	26.27	96.80	75.36	70.24	55	11.19	4.93	39.28								
Vine		110 1/2	183.83	2.24	16.08	171.60	257.06	4.30	9.87	7.42	16.36	.17	3.25										
Total Forward		11,725 1/2	\$29,967.57	\$660.09	\$2,516.64	\$2,131.18	\$5,889.04	\$1,329.09	\$5,294.90	\$2,402.42	\$2,816.66	\$127.69	\$312.20	\$367.51	\$642.70	\$133.02	\$910.17	\$56,201.21					

WORK DISTRIBUTED ON STREETS—CONTINUED.

Date.	Street.	Cleaning.		Paved Streets.		Dirt and Macadam Streets.		Sewer Maintenance		Crosswalks.		Sidewalks.		Bridges.		Miscellaneous.		Total Expense.
		No. Loads Removed	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	
1895	T's forw'd.	14,728½	\$29,967.37	\$660.09	\$2,516.64	\$2,331.18	\$5,889.04	\$1,339.69	\$5,264.80	\$2,402.42	\$2,816.66	\$127.69	\$312.30	\$567.34	\$ 642.70	\$433.02	\$ 910.17	\$56,201.21
April 16	Virginia..	8½	18.86						2.47	2.86	7.51							31.70
to	Wabash..	57½	128.30	1.89	37.92		3.45		76	43.74	50.60							288.23
1896	Wall..	53½	241.26						23.57									211.26
April 20	Walnut..	713½	1,430.40						61.46	4.35	5.26							1,501.47
	Walrus..	33½	88.27	1.13	17.27		354.93		5.33	30.86	41.13			5.64	16.73			1,561.29
	Washington.	107	210.53	7.60	42.64	50	2.38		14.38	10.72	16.11							307.77
	W. Prospt't.	7½	24.25							11.69	18.99	45		1.90			2.91	57.34
	Whittier Pl.								82									82
	Witte Pl.									5.64	4.73							10.37
	Woodland..	82	146.71	5.80	52.00		106.72	5.40	22.50	38.21	42.92	36	5.26					125.90
	Woodl'd Ct.								1.64									1.64
	Wyandotte	291½	583.74				59.15	14.15	21.08	13.10	11.95							703.47
	Wyoming..	153½	131.66			60	1.64		2.89	12.14	6.90			2.49	17.90			176.32
	Totals..	16,241½	\$32,971.35	\$679.51	\$2,666.17	\$2,332.28	\$6,417.31	\$1,360.30	\$5,440.96	\$2,376.03	\$3,092.76	\$128.50	\$319.36	\$575.67	\$ 677.33	\$433.02	\$ 918.08	\$60,318.93
Material and Labor, April 16, 1895, to April 20, 1896.....			\$32,971.35		\$3,315.94		\$8,749.39		\$6,801.26		\$5,598.79		\$447.86		\$1,253.00		\$1,316.10	\$60,313.93

WORK DISTRIBUTED ON ALLEYS.

Date.	Cleaning.		Paved Alleys.		Unpaved Alleys.		Sewer Maintenance.		Miscellaneous.		Total Expense.
	No. Loads Removed.	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	
April 16th to 30th, 1895.	23½	\$56 15				\$3.00		\$14.08		\$34.43	\$ 98.58
May.	37	98.26				4.19		2.11		98.27	214.40
June.	23½	64.62			\$1.15	9.19				214.96	290.43
July.	18	33.48				14.39				117.94	198.78
August.	32	87.72	\$1.11	\$12.76		27.49				100.95	263.42
September.	21	54.70		1.58	9.45	19.42		10.65		63.96	151.03
October.	32	84.87		10.13		14.65				62.87	165.74
November.	26	63.41		1.68		9.80		10.50		100.25	197.56
December.	17½	40.28				24.63				95.53	160.44
January.	21	34.69		6.20		12.56		13.90		38.61	110.01
February.		4.17				7.31				14.35	25.43
March.	20	10.22				1.79				40.87	52.48
April 1st to 20th, 1896.	26	33.85								18.80	52.65
Totals	301	\$686.42	\$6.44	\$62.11	\$10.40	\$147.02	\$53.24	\$1,001.83		\$10.67	\$1,978.57
Material & labor Ap. 16, '95, to Ap. 20, '96		\$686.42		\$68.39		\$157.82		\$1,055.07		\$10.67	\$1,978.57

MISCELLANEOUS WORK.

Date.	Cleaning.		Fountains.		Cutting Weeds.		City Hospital.		Main St. Sewer.		General Hauling.		Painting Bridges.		Miscellaneous.		Total Expense.
	No. Loads Removed	Cost.	Material.	Labor.	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.		
April 16th to 30th, 1895		\$ 30.22	\$ 2.00	\$ 22.75								\$109.70				\$ 34.16	\$ 198.83
May, 1895		42.50	9.22	55.12								21.50				41.54	169.76
June, 1895	40	21.45	5.65	43.75	\$ 66.50	\$ 2.32	\$ 4.38				78.13					6.83	280.91
July, 1895		83.58	8.98	32.50	512.85	97.62	227.50				9.68						992.66
August, 1895	14	11.53	11.35	32.50	221.38	27.25	116.00				60.67					43.14	532.67
September, 1895	2	2.68	5.39	35.00	266.00						58.20					12.34	379.81
October, 1895	6	21.65	11.97	30.15	63.00						181.65					59.82	391.08
November, 1895			5.88	42.00					\$ 48.63		85.23					204.03	353.77
December, 1895	20	50.71	8.21	49.01				\$ 248.48	578.46		8.38					25.90	8,192.15
January, 1896		63.50	6.75	50.75				\$ 301.49	590.18		28.86					101.13	1,327.36
February, 1896	21	60.07	5.85	47.25				203.73	564.27		1.88					45.48	980.93
March, 1896		46.60	3.55	45.50				252.29	457.13		1.82					10.51	817.10
April 1st to 20th, 1896		48.54	3.55	31.50				31.50	138.13		.92					2.64	256.68
Totals.....	103	\$ 471.50	\$ 68.68	\$ 578.38	\$ 1,129.73	\$ 127.19	\$ 347.88	\$ 1,037.49	\$ 3,366.80		\$ 614.92	\$ 544.50	\$ 1,796.70	\$ 62.32	\$ 537.52	\$ 69,773.61	
Material and Labor { April 16th, 1895, to April 20th, 1896, }		\$171.50		\$667.06	\$ 1,129.73		\$175.07		\$3,404.29		\$ 614.92		\$2,341.20		\$ 669.84	\$ 69,773.61	

SUMMARY.

		Totals.	
Total expense on streets, alleys and miscellaneous work April 16th, 1895, to April 20th, 1896		\$73,266.11	
Miscellaneous expense account		12,976.32	
Estimated value of material on hand April 20th, 1896		1,179.44	
Total expense to, and material on hand, April 20th, 1896		\$85,921.87	

CONTRACTED STREETS—CONTINUED.

Streets.	From	To	Commenced.	Contract Expires.	Lineal Feet on Street.	Clean'd Times per Week.	Cost per Clean-ing.	Sprin-kled Times per Day.	Price per Lineal Ft. per Month.	Company.
Nineteenth.....	Wyoming	State Line.	June 21, 1895	Nov. 30, 1896	894	.....	.....	3	.....	.....
Seventeenth.....	Madison	Holly	June 21, 1895	Nov. 30, 1896	927	.....	.....	do.	.....	Citizens.
Tenth.....	Main	Grand	June 21, 1895	Nov. 30, 1896	485	.....	.....	1	.01 4-5	Citizens.
Grand.....	Eighth	Twenty first.	June 21, 1895	Nov. 30, 1896	5,954	.....	.....	4	.01 4-9	Citizens.
St. Louis.....	Union	State Line	June 21, 1895	Nov. 30, 1896	3,814	.....	.....	4	.01 9-10	Citizens.
Union.....	Bluff St. Bridge	Hickory	May 6, 1895	Nov. 30, 1896	2,367	.....	.....	4	.01 1-5	Citizens.
Charlotte.....	Independence	Fifth	June 4, 1895	Nov. 30, 1896	988½	.....	.....	3	.02 2-3	Metropolitan.
Holmes.....	Independence	Third	June 8, 1895	Nov. 30, 1896	1,500	.....	.....	do.	.01 1-5	Metropolitan.
Twelfth.....	Liberty	Bell	June 8, 1895	Nov. 30, 1896	1,081	.....	.....	do.	.01 1-5	Metropolitan.
Eleventh.....	Mill	Hickory	June 8, 1895	Nov. 30, 1896	2,389	.....	.....	do.	.01 1-5	Metropolitan.
Broadway.....	Twelfth	Sixteenth	June 8, 1895	Nov. 30, 1896	2,244	.....	.....	do.	.01½	Metropolitan.
Genesee.....	Twelfth	Seventeenth	June 8, 1895	Nov. 30, 1896	1,821	.....	.....	do.	.01 1-3	Metropolitan.
Broadway.....	Sixteenth	Holmes	June 8, 1895	Nov. 30, 1896	1,616½	.....	.....	do.	.01 6-25	Metropolitan.
Fourth.....	Grand	Broadway	June 8, 1895	Nov. 30, 1896	1,384	.....	.....	do.	.01 27-100	Kansas City.
Fifth.....	Grand	Broadway	June 8, 1895	Nov. 30, 1896	2,070½	.....	.....	do.	.01 35-100	Kansas City.
Sixth.....	Main	Broadway	June 8, 1895	Nov. 30, 1896	1,852½	.....	.....	4	.01 31-100	Kansas City.
Ninth.....	Grand	Locust	June 8, 1895	Nov. 30, 1896	866	.....	.....	4	.01 31-100	Kansas City.
Ninth.....	Santa Fe.	State Line.	June 8, 1895	Nov. 30, 1896	2,521	.....	.....	8	.01 31-100	Kansas City.
Wall.....	Seventh	Ninth	June 8, 1895	Nov. 30, 1896	657	.....	.....	do.	.01½	Kansas City.
Walnut.....	Fourth	Thirteenth	June 21, 1895	Nov. 30, 1896	3,460	.....	.....	4	.01 1-3	Kansas City.
Wyandotte.....	Second	Ninth	June 21, 1895	Nov. 30, 1896	2,407	.....	.....	5	.01 9-20	Kansas City.
Main.....	Third	Nineteenth	June 21, 1895	Nov. 30, 1896	7,057	.....	.....	4	.01 37-200	Kansas City.
Delaware.....	Fourth	Ninth	June 21, 1895	Nov. 30, 1896	1,913	.....	.....	5	.01 9-20	Kansas City.
Ninth.....	Main	Broadway	June 21, 1895	Nov. 30, 1896	1,863	.....	.....	4	.01 37-100	Kansas City.
Eleventh.....	Main	Grand	June 21, 1895	Nov. 30, 1896	1,517	.....	.....	5	.01 8-20	Kansas City.
Missouri Ave.....	Delaware	Forest	July 5, 1895	Nov. 30, 1896	4,464	.....	.....	2	.01 9-20	Kansas City.
Independence.....	Grand	Woodland	Aug. 13, 1895	Nov. 30, 1895	5,939	.....	.....	4	.01 1-10	Citizens.

ANNUAL REPORT
—OF THE—
SUPERINTENDENT OF BUILDINGS,

—FOR THE—
FISCAL YEAR ENDING NOON APRIL 20TH, 1896.

A. W. LOVE, Superintendent.

KANSAS CITY, MISSOURI, April 20th, 1896.

*To the Honorable Board of Public Works,
Kansas City, Mo.:*

GENTLEMEN:—I have the honor to submit herewith a report of the operations of the Department of Buildings for the fiscal year 1895. I stated in my last annual report that “the indications seemed to point to renewed activity” for the building season of 1895. In this forecast I was not mistaken, as an examination of the appended report will show, when compared with the one made a year ago. My report for the fiscal year 1894 showed a total number of permits issued of 1,737, at an aggregate estimated cost of \$1,418,695, whilst the present report shows a grand total for the year of 1,773, the approximate cost of which is estimated at \$1,601,800, showing the very gratifying increase of more than thirteen per cent., or in round numbers \$183,105. Adding about the usual amount for underestimated valuation, say twenty to twenty-five per cent, we find that the building improvements in Kansas City the past year does not fall far short of two million dollars. This is still far short of the ten and eleven million dollar mark of the “hey-day boom days;” but, notwithstanding, it is still gratifying to note that the tendency is upward and that the increase, though slow, is in the right direction.

The new City Hospital has been commenced and completed during the year, under my supervision. This work required very close attention on the part of the Department, for the reason that enough funds were not available at any one time to

let the entire contract to one party and then hold said party responsible for the completion in its entirety. On the contrary, the work had to be done by piecemeal as fast as funds could be obtained, and the carpenter-work was done entirely by days'-work. Notwithstanding the extra cost necessarily incurred by the mode of construction, the building was completed at less cost to the City than had the contract for the entire work been let to a single party. This was largely brought about by the very strictest attention to details and by making every dollar go just as far as possible in the purchase of the various materials entering into the construction. The new building is a credit to the City, is modern in all its appointments, and peculiarly adapted in all its details for the purpose for which it is to be used.

The old brick wing of the City Hospital, which was built several years ago, badly needs a general overhauling, in order to have it come up to the standard of the new building, and if funds are available I think that the repairs on it should be made during the present season. When the old brick wing is put in proper condition, Kansas City can boast of as fine a city hospital as there is in the West.

Last fall the Honorable Common Council set aside \$2,500 to build the foundation of the new City Workhouse. By close figuring and using workhouse labor, I completed the foundation for less than \$1,700. In this connection I desire to say that if there is a public necessity exists in Kansas City it is for the immediate construction of a new workhouse, in accordance with the plans and specifications which were prepared by me more than a year ago, and which have been approved and adopted by a joint committee of the Common Council. The present facilities at the old Workhouse for caring for prisoners are not only disgraceful to a city like this, but a menace to the life and health of the human souls herded therein. I trust that steps will at once be taken by your Honorable Body, in conjunction with the Common Council, to provide sufficient funds to rush to completion the superstructure of the new Workhouse building.

Soon after the acquisition by the City of the Waterworks, it was found that many of the buildings in connection therewith required immediate repairs. All of that work was done by this Department, as well as making many interior changes in the City Hall in order to properly accommodate the Water Department with necessary room and the proper facilities for the transaction of its business.

Since my last report I have caused to be made two semi-annual factory inspections, under the State law, a report of which is herewith appended, and which were submitted to the State Labor Bureau on the dates mentioned therein.

In the table showing list of official notices of unsafe structures served, you will note that 161 notices have been served, which, considering the immense amount of other work devolving on the Department during the past year, I consider a most excellent showing. I condemned and ordered 48 buildings torn down and 49 repaired, and of the other 64 notices many of them were for gutters and down-spouts, fire escapes, etc., etc.

I have endeavored at all times to enforce strictly and without fear or favor all of the provisions of the ordinances regulating the affairs of my department. Several arrests have been made, upon warrants sworn out by me, for parties who persisted in violating the law, and in every case a speedy conviction has followed in the Police Court.

Following are the various tables, which explain themselves:

BUILDING PERMITS ISSUED AS FOLLOWS, BY MONTHS:

No. of Permits.	Kind of Buildings.	Front Feet.	Estimated Cost.	Fees.
APRIL 15TH, NOON, TO APRIL 30TH, 1895:				
3	Brick Business	100	\$ 16,500.00	\$ 8.25
7	Brick Residence	210	20,700.00	10.35
1	Brick Barn	20	900.00	.50
1	Brick Washroom	14	100.00	.50
1	Frame Business	24	750.00	.50
10	Frame Residence	257	14,900.00	8.40
2	Frame Barn	32	500.00	1.00
1	Frame Office	10	250.00	.50
1	Frame Club House	20	1,000.00	.50
1	Frame Bowling Alley	14	600.00	.50
1	Frame Warehouse	10	160.00	.50
89	Miscellaneous Permits		17,650.00	44.15
118	Total	711	\$ 74,000.00	\$ 75.65
MONTH OF MAY, 1895.				
11	Brick Business	428	\$ 76,400.00	\$ 88.35
3	Brick Residence	80	8,450.00	4.50
1	Brick Barn	18	1,000.00	.50
1	Brick Hotel	36	10,000.00	5.00
1	Brick Medical College	13	5,000.00	2.50
16	Frame Residence	326	20,300.00	10.95
1	Frame Church	42	4,000.00	2.00
156	Miscellaneous Permits		69,240.00	97.60
190	Total	943	\$194,430.00	\$161.40
MONTH OF JUNE, 1895.				
5	Brick Business	212	\$ 47,200.00	\$ 23.40
9	Brick Residence	203	19,600.00	9.85
2	Brick Warehouse	215	9,500.00	4.75
1	Brick Stock Exchange	45	60,000.00	30.00
20	Frame Residence	449	30,550.00	16.95
1	Frame Barn	16	150.00	.50
1	Frame Machinery Manufacturing	20	500.00	.50
123	Miscellaneous Permits		57,030.00	78.85
162	Total	1,190	\$224,530.00	\$165.00
MONTH OF JULY, 1895.				
4	Brick Business	157	\$ 60,700.00	\$ 31.00
7	Brick Residence	197	26,200.00	13.20
1	Brick Barn	34	1,000.00	2.00
1	Brick Church	16	2,000.00	1.00
1	Brick Pump House	210	8,000.00	4.00
20	Frame Residence	465	32,400.00	17.05
1	Frame Barn	18	200.00	.50
1	Frame Warehouse	50	1,500.00	.75
125	Miscellaneous Permits		34,890.00	73.45
171	Total	1,177	\$169,890.00	\$142.95
MONTH OF AUGUST, 1895.				
6	Brick Business	194	\$ 52,200.00	\$ 26.10
2	Brick Residence	49	5,500.00	2.75
1	Brick Barn	24	1,000.00	.50
2	Brick Office	90	15,000.00	7.50
1	Brick Engine	55	6,000.00	3.00
1	Brick Generating	100	10,000.00	5.00
1	Brick Pump House	21	300.00	.50
23	Frame Residence	519	32,250.00	18.15
3	Frame Barn	47	450.00	1.50
1	Frame Greenhouse	18	150.00	.50
152	Miscellaneous Permits		37,830.00	92.90
193	Total	1,120	\$160,710.00	\$148.40

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
MONTH OF SEPTEMBER, 1895.				
2	Brick Business.....	80	\$ 9,800.00	\$ 4.90
10	Brick Residence.....	244	29,900.00	14.90
2	Brick Barn.....	44	4,300.00	2.50
1	Brick Hotel.....	24	2,800.00	1.40
1	Brick Hospital.....	76	3,100.00	1.55
1	Frame Business.....	20	900.00	.50
13	Frame Residence.....	301	23,550.00	12.00
2	Frame Barn.....	48	600.00	1.00
127	Miscellaneous Permits.....		26,240.00	65.60
159	Total.....	837	\$101,990.00	\$104.35
MONTH OF OCTOBER, 1895.				
2	Brick Business.....	39	\$ 7,700.00	\$ 4.25
5	Brick Residence.....	108	13,600.00	7.00
2	Brick Engine.....	55	8,200.00	4.10
1	Brick Generating.....	23	2,600.00	1.00
1	Frame Business.....	30	1,500.00	.75
14	Frame Residence.....	342	28,900.00	15.45
1	Frame Barn.....	20	130.00	.50
1	Frame Warehouse.....	24	400.00	.50
1	Frame Machinery Manufacturing.....	32	1,000.00	.50
138	Miscellaneous Permits.....		22,630.00	70.75
166	Total.....	673	\$ 86,060.00	\$104.80
MONTH OF NOVEMBER, 1895.				
3	Brick Business.....	69	\$ 5,000.00	\$ 2.60
9	Brick Residence.....	299	37,000.00	18.50
2	Brick Barn.....	44	1,100.00	1.00
1	Brick Greenhouse.....	17	250.00	.50
6	Frame Residence.....	138	7,600.00	4.05
1	Frame Foundry.....	50	1,000.00	.50
1	Frame Church.....	24	800.00	.50
98	Miscellaneous Permits.....		19,500.00	51.00
121	Total.....	641	\$ 72,250.00	\$ 78.65
MONTH OF DECEMBER, 1895.				
3	Brick Business.....	300	\$ 94,000.00	\$ 47.50
6	Brick Residence.....	94	3,000.00	3.25
1	Brick Public Library.....	134	113,000.00	56.50
1	Frame Business.....	18	300.00	.50
10	Frame Residence.....	226	17,500.00	9.00
1	Frame Office.....	12	100.00	.50
52	Miscellaneous Permits.....		10,880.00	26.00
74	Total.....	782	\$238,280.00	\$142.75
MONTH OF JANUARY, 1896.				
2	Brick Business.....	37	\$ 900.00	\$ 1.00
1	Brick Residence.....	25	1,500.00	.75
1	Brick Engine House.....	48	6,000.00	3.00
2	Frame Business.....	41	1,300.00	1.00
5	Frame Residence.....	117	5,100.00	2.95
1	Frame Barn.....	16	200.00	.50
54	Miscellaneous Permits.....		16,920.00	30.50
66	Total.....	274	\$ 31,920.00	\$ 39.70

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
MONTH OF FEBRUARY, 1896.				
2	Brick Business.....	94	\$ 8,000.00	\$ 4.00
4	Brick Residence.....	99	4,300.00	2 25
1	Frame Business.....	30	600.00	.50
16	Frame Residence.....	330	22,400.00	13 50
1	Frame Coal House.....	41	2,000.00	1.00
1	Frame Church.....	53	1,500.00	.75
67	Miscellaneous Permits.....		14,720.00	33 95
92	Total.....	647	\$ 53,520.00	\$ 55 95
MONTH OF MARCH, 1896.				
2	Brick Business.....	153	\$ 36,500.00	\$ 18 25
10	Brick Residence.....	219	15,900.00	8 35
3	Brick Barn.....	103	6,000.00	3.00
1	Brick Warehouse.....	70	4,000.00	2.00
1	Brick Church.....	60	12,000.00	6.00
1	Frame Business.....	35	1,000.00	.50
20	Frame Residence.....	443	19,800.00	15 70
2	Frame Barn.....	31	700.00	1.00
2	Frame Scale house.....	60	1,200.00	1.00
102	Miscellaneous Permits.....		40,470.00	57 25
144	Total.....	1,178	\$187,570.00	\$113 05
APRIL 1ST TO NOON, APRIL 20TH, 1896.				
8	Brick Residence.....	144	\$ 9,500.00	\$ 6 50
1	Brick Livery Barn.....	49	7,000.00	3 50
1	Brick Stable.....	25	1,000.00	.50
2	Frame Business.....	110	7,500.00	3 75
9	Frame Residence.....	190	9,200.00	5 05
1	Frame Barn.....	14	350.00	.50
1	Frame Blacksmith Shop.....	16	100.00	.50
1	Frame Warehouse.....	25	600.00	.50
1	Frame Ice Manufacturing Plant.....	100	2,000.00	1.00
1	Frame Church.....	47	7,500.00	3 75
91	Miscellaneous Permits.....		12,850.00	45 50
117	Total.....	724	\$ 57,600.00	\$ 71 05

SUMMARY FOR THE YEAR BY MONTHS.

Number of Permits.	Months	Front Feet.	Estimated Cost.	Fees.
118	April 15th, noon, to April 30, 1895.....	711	\$ 74,000.00	\$ 75 65
190	May, 1895.....	943	194,430.00	161 40
162	June, 1895.....	1,190	244,530.00	165 00
171	July, 1895.....	1,177	169,890.00	142 95
193	August, 1895.....	1,120	160,710.00	148 40
159	September, 1895.....	847	101,090.00	104 35
166	October, 1895.....	673	86,060.00	104 80
121	November, 1895.....	611	72,250.00	78 65
74	December, 1895.....	782	238,230.00	142 75
66	January, 1896.....	274	51,920.00	39 70
92	February, 1896.....	647	53,520.00	55 95
144	March, 1896.....	1,178	187,570.00	113 05
117	April 1st to April 20th, noon, 1896.....	724	57,600.00	71 05
1,773	Total for year.....	10,897	\$ 1,601,800.00	\$ 1,104 50

SUMMARY OF MISCELLANEOUS PERMITS BY MONTHS.

Number of Permits.	Months.	Estimated Cost.	Fees.
89	April 15th, noon, to April 30th, 1895.....	17,650.00	44.15
156	May, 1895.....	69,280.00	97.60
123	June, 1895.....	57,030.00	78.85
135	July, 1895.....	34,890.00	73.45
152	August, 1895.....	37,830.00	82.90
127	September, 1895.....	26,240.00	65.60
138	October, 1895.....	22,630.00	70.75
98	November, 1895.....	19,500.00	51.00
52	December, 1895.....	10,330.00	26.00
34	January, 1896.....	16,920.00	30.50
67	February, 1896.....	14,720.00	33.95
102	March, 1896.....	40,470.00	57.25
91	April 1st to noon of April 20th, 1896.....	12,850.00	45.50
1,384	Total Miscellaneous Permits for year.....	380,340.00	757.50

CLASSIFIED SUMMARY.

Number of Permits.	Kind of Buildings.	Front Feet.	Estimated Cost.	Fees.
V 45	Brick Business.....	1,895	414,900.00	209.30
81	Brick Residence.....	1,969	195,050.00	102.15
13	Brick Barn.....	361	26,300.00	14.00
2	Brick Hotel.....	50	12,800.00	6.40
3	Brick Warehouse.....	285	13,500.00	6.75
4	Brick Engine.....	158	20,200.00	10.10
2	Brick Church.....	706	14,000.00	7.00
2	Brick Generating.....	123	12,000.00	6.00
2	Brick Pump.....	234	8,300.00	4.50
2	Brick Office.....	90	15,000.00	7.50
1	Brick Public Library.....	134	113,000.00	56.50
1	Brick Stock Exchange.....	45	60,000.00	30.00
1	Brick Medical College.....	13	5,000.00	2.50
1	Brick Hospital.....	76	3,100.00	1.55
1	Brick Greenhouse.....	17	250.00	.50
1	Brick Washroom.....	14	100.00	.50
162	Total Brick Structures.....	5,570	913,500.00	465.25
10	Frame Business.....	308	13,850.00	8.00
182	Frame Residence.....	4,105	264,450.00	149.20
14	Frame Barn.....	246	3,310.00	7.00
2	Frame Office.....	22	350.00	1.00
4	Frame Warehouse.....	109	2,650.00	2.25
4	Frame Church.....	166	13,800.00	7.00
2	Frame Scalehouse.....	60	1,200.00	1.00
2	Frame Machinery Manufacturing.....	52	1,500.00	1.00
1	Frame Club House.....	20	1,000.00	.50
1	Frame Bowling Alley.....	14	150.00	.50
1	Frame Greenhouse.....	18	150.00	.50
1	Frame Foundry.....	50	1,000.00	.50
1	Frame Ice Manufacturing Plant.....	100	2,000.00	1.00
1	Frame Coal House.....	41	2,000.00	1.00
1	Frame Blacksmith Shop.....	16	100.00	.50
227	Total Frame Structures.....	5,327	307,960.00	180.95

GENERAL SUMMARY FOR THE YEAR.

Number of Permits.	Kind of Buildings	Front Feet.	Estimated Cost.	Fees.
162	Brick Building Permits.....	5,570	913,500 00	465.25
227	Frame Building Permits.....	5,327	307,960 00	180.95
1,394	Miscellaneous Building Permits.....		380,340 00	757.50
1,778	Grand Total for the year.....	10,897	1,601,800 00	1,403.70

STATEMENT SHOWING RECEIPTS FOR MONEY DEPOSITED WITH
CITY TREASURER.

Date.	Amount.	Date.	Amount.	Date	Amount.
April 22, 1895.....	26.75	Brought Forward.....	693.40	Brought Forward.....	\$1,163.65
April 30, 1895.....	18.90	Sept. 16, 1895.....	49.45	Feb 11, 1896.....	11.75
May 8, 1895.....	32.50	Sept. 24, 1895.....	22.55	Feb 18, 1896.....	11.50
May 15, 1895.....	39.70	Oct. 1, 1895.....	32.35	Feb 25, 1896.....	12.25
May 22, 1895.....	50.45	Oct. 12, 1895.....	42.95	Mar. 3, 1896.....	20.45
May 31, 1895.....	38.75	Oct. 22, 1895.....	30.00	Mar. 10, 1896.....	40.25
June 8, 1895.....	36.40	Nov. 2, 1895.....	31.35	Mar. 20, 1896.....	16.00
June 15, 1895.....	36.50	Nov. 15, 1895.....	38.15	Mar. 25, 1896.....	17.50
June 22, 1895.....	55.35	Nov. 23, 1895.....	25.80	April 2, 1896.....	19.30
June 29, 1895.....	36.75	Dec. 2, 1895.....	14.90	April 8, 1896.....	20.05
July 9, 1895.....	24.55	Dec. 11, 1895.....	28.25	April 15, 1896.....	28.50
July 16, 1895.....	29.75	Dec. 18, 1895.....	74.50	April 18, 1896.....	22.50
July 25, 1895.....	17.25	Dec. 23, 1895.....	31.50		
Aug 2, 1895.....	71.40	Jan. 2, 1896.....	8.50		
Aug 8, 1895.....	59.40	Jan. 15, 1896.....	12.00		
Aug 23, 1895.....	47.50	Jan. 24, 1896.....	15.70		
Sept. 3, 1895.....	41.50	Feb 5, 1896.....	12.00		
Carried Forward.....	693.40	Carried Forward.....	\$1,163.65	Total Deposits.....	\$1,403.70

LIST OF OFFICIAL NOTICES SERVED DURING THE YEAR.

	No.
Buildings condemned and ordered torn down	48
Unsafe buildings ordered repaired	49
Porches ordered repaired	12
Gutters and down spouts ordered on buildings	14
Gutters and down spouts ordered connected with sewer	4
Unsafe chimneys ordered torn down	2
Unsafe chimneys ordered repaired	5
Fire escapes ordered	4
Stairways ordered repaired	4
Retaining wall ordered torn down	2
Retaining wall ordered repaired	2
Prismatic lights ordered repaired	2
Front steps which projected out into street ordered removed	3
Frame awnings ordered torn down	2
Skylight ordered repaired	1
Floors overloaded ordered relieved	1
Dangerous old open cistern ordered filled up	1
Open cistern ordered curbed	1
Frame awning ordered repaired	1
Iron fire-proof shutters ordered placed on building	1
Open excavation on lot ordered barricaded	1
Dangerous sidewalk grating ordered put in safe condition	1
Total number of official notices served	161

PAY ROLL OF THE DEPARTMENT FOR THE YEAR.

Months.	Amount.
April 15th, noon, to April 30th, 1895	\$ 288.67
Month of May, 1895	580.93
Month of June, 1895	566.53
Month of July, 1895	580.93
Month of August, 1895	580.93
Month of September, 1895	568.33
Month of October, 1895	580.93
Month of November, 1895	570.13
Month of December, 1895	570.13
Month of January, 1896	580.93
Month of February, 1896	559.33
Mouth of March, 1896	562.93
April 1st to noon, April 20th, 1896	324.25
Total pay roll for year	\$6,914.95

SYNOPSIS OF REPORT OF FACTORY INSPECTIONS

MADE TO THE STATE LABOR COMMISSIONER FOR THE SEMI-ANNUAL TERM
ENDING AUGUST 31st, 1895.

Specifying :	Number.
Total number of establishments inspected.....	147
Total number of repairs ordered and complied with	2
Total number of employes in the 147 establishments inspected....	7,236
Total number of men employed	4,259
Total number of women employed.....	2,419
Total number of boys between 14 and 18 years of age employed....	346
Total number of girls between 14 and 18 years of age employed....	129
Total number of boys under 12 years old employed.....	9
Total number of girls under 14 years old employed.....	73
Average number of employes in the 147 establishments inspected..	49 ¹⁷ / ₁₄₇

SYNOPSIS OF REPORT OF FACTORY INSPECTIONS

MADE TO THE STATE LABOR COMMISSIONER FOR THE SEMI-ANNUAL TERM
ENDING FEBRUARY 29th, 1896.

Specifying :	Number.
Total number of inspections made	139
Total number of repairs ordered and complied with.....	1
Total number of employes in the 139 establishments	8,547
Total number of men employed	5,933
Total number of women employed.....	2,591
Total number of boys over 12 and under 18 years of age.....	405
Total number of girls over 14 and under 18 years of age	121
Total number of boys under 12 years of age.....	12
Total number of girls under 14 years of age	55
Total average number employed.....	61 ¹² / ₁₃₉

All of which is respectfully submitted.

A. W. LOVE,
Superintendent of Buildings.

WATER DEPARTMENT.

May 21st, 1896.

*To the Honorable Board of Public Works.***GENTLEMEN :**

I have the honor to submit my report of the operations of the Water Department of this City, obtained from the books of the former Superintendent, from September 1, 1895, to April 20, 1896, being the end of the fiscal year.

Total cost of operating plant.....				\$89,582.40
From which deduct the following :				
Amount expended for betterment of plant..			\$14,030.68	
“ Earned by Meter Department.....			3,834.38	
“ Earned by Street Department.....			1,111.43	
“ Earned by Inspection Department.....			892.70	
“ Water furnished Metropolitan Com- pany.....			\$14,870.49	
Less amount allowed said Co. by Board of Public Works for use of pump at Kaw Point.....	2,120.85	12,749.64	32,618.83	
Net cost.....				\$56,963.57
Total amount of Coal received at Turkey Creek.....	14,032,630	lbs		
Total amount of Coal consumed at Turkey Creek.....	13,191,076	lbs		
Total amount of Coal on hand April 20th at Turkey Creek ..	841,554	lbs		
Total amount of Coal received at Quindaro.....	6,257,250	lbs		
Total amount of Coal consumed at Quindaro.....	5,476,080	lbs		
Total amount of Coal on hand at Quindaro.....	781,170	lbs		
Total cost of Coal consumed at Turkey Creek.....	\$8,574	20		
Total value of Coal on hand at Turkey Creek.....	547.00			
Total cost of Coal consumed at Quindaro.....	3,559	45		
Total value of Coal on hand at Quindaro.....	507.75			
Total water pumped at Turkey Creek.....	1,979,154,712	gals		
Total water pumped at Quindaro.....	2,474,836,713	gals		
Total water furnished Metropolitan Water Co. from Kaw Point Station.....	495,682,001	gals		

Respectfully submitted,

D. W. LONGWELL,*Superintendent.*



**This book is under no circumstances to be
taken from the Building**

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